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Acronym Table

Waste Analysis Plan (WAP)

Clean Harbors Kansas, LLC (CHK)

Kansas Administrative Regulations (KAR)

Resource Conservation and Recovery Act (RCRA)

Title 40 of the Code of Federal Regulations (40 CFR)

Polychlorinated Biphenyl (PCB)

Toxic Substance Control Act (TSCA)

American Society for Testing and Materials (ASTM)

Personal Protective Equipment (PPE)

American Public Health Association (APHA)

Environmental Protection Agency (EPA)

Waste Profile Sheet (WPS)

Quality Assurance/Quality Control (QA/QC)

National Institute of Standards and Technology (NIST)

Relative Percent Difference (RPD)

WASTE ANALYSIS PLAN

1.0 Introduction: 40 CFR 270.14 (b) (3), 40 CFR 264.13 (b) and (c)

1.1 Purpose:

The purpose of this Waste Analysis Plan (WAP) is to establish sampling and analytical requirements for waste characterization, acceptance, storage, treatment or other management at Clean Harbors Kansas, LLC (CHK). This WAP fulfills the requirements of the Kansas Administrative Regulations (KAR), and 40 CFR Parts 260 through 270. Therefore, this section will refer only to the federal regulations.

The WAP is intended to be the primary reference document for waste analysis performed in conjunction with operation (and closure) of Clean Harbors Kansas, LLC. The WAP addresses the following topics.

- Analytical parameters and rationale (Section 2.0).
- Analytical methods (Section 3.0).
- Sampling methods (Section 4.0).
- Pre-Acceptance procedures (Section 5.0).
- Incoming load procedures (Section 6.0).
- Storage, treatment or other waste management activities (Section 7.0).
- Quality assurance and quality control (Section 8.0).

Any modification to the Waste Analysis Plan will be made in accordance with 40 CFR 270.42.

1.2 **Definitions**:

The terms provided below, applied within the WAP, will have the following meaning.

Analysis: The term "analysis" means any method by which the value of, or a range of values for, a particular parameter is determined. These methods may include laboratory procedures specified in Attachment C-C. If these procedures cannot be performed, the circumstances will be documented in the operating record and the value of, or range of values for, a particular parameter will be determined based on knowledge of the waste or of the process generating the waste.

Batch: The term "batch" will refer to some quantity of waste consisting of an individual waste stream or a mixture of waste streams which have been combined for the purpose of management at Clean Harbors Kansas, LLC.

Bulk Container: The term "bulk container" will mean any container as defined in 40 CFR 260.10 which has a capacity of greater than 450 gallons (e.g., and intermodal container, end-dump truck, gondola, tanker truck, etc.).

Container: The term "container" without the qualifier "bulk," will have the same meaning as defined in 40 CFR 260.10.

Hazardous waste: The definition of "hazardous waste" shall be as defined in 40 CFR 261.3.

Incoming Load: The term "incoming load" refers to a waste shipment manifested to CHK. Upon arrival, the shipment will be staged or placed in a CMU and will remain an incoming load until it is either rejected, trans-shipped to another location, or finally accepted for management at CHK.

Nonhazardous Waste: "Nonhazardous Waste" refers to "solid waste" as defined in 40 CFR 261.2 which is not "hazardous waste" as defined in 40 CFR 261.3. This may include solid waste such as "empty containers" as defined by 40 CFR 261.7, exempt solid and/or hazardous waste as defined by 40 CFR 261.4, sludge from Publicly Owned Treatment Works, household hazardous waste, garbage, refuse, etc.

Parameter: The term parameter" is a specific material property, such as pH, specific gravity, viscosity, etc., or a concentration of a particular constituent of the waste or material.

PCB (s): The term "PCB (s)" refers to PCB (s) or PCB Item (s) as defined in 40 CFR Part 761.

Pre-acceptance: The period in which a waste stream's acceptability for management at CHK is evaluated is referred to as "pre-acceptance".

Radioactive: A "radioactive" material, or "regulated radioactive material", will mean any material as defined by 10 CFR 20.3 or by KAR 28-35-135.

Solid Waste: The definition of "solid waste' shall be as provided in 40 CFR 261.2.

Staging: The term "staging" refers to the temporary placement of containers during movement into or out of storage or processing areas.

Staging generally occurs for a few hours, and will not exceed 72 hours (three days). Typical staging areas are loading and receiving areas situated adjacent to processing units.

Suitable Laboratory: A "suitable laboratory" is an analytical laboratory which meets the minimum quality assurance requirements as specified in this WAP, operates under a Quality Assurance/Quality Control Plan, and uses appropriate SW-846 methods or methods listed in Attachment C-C. Analytical results submitted from off-site laboratories must certify what standard analytical methods were used to obtain the data. If non-standard methods (e.g., methods modified and approved for use at that laboratory) were used, documentation must be provided to support the validity of the data.

Technical Manager: The "technical manager" refers to the individual, or a designee, responsible for implementation of the WAP.

Transfer Facility: A transfer facility means any transfer related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation for a period not to exceed 10 days, between the point of generation and the shipment destination. The transfer facility does not serve as the treatment, storage, or disposal location for that manifest, and is not identified on the manifest. A 10 day transfer facility has the same meaning in this document.

Trans-shipment: Trans-shipment is the temporary storage of wastes at the facility for the purpose of shipping the wastes to another facility without on-site processing. Trans-shipped wastes will be subject to the minimum incoming load procedures, and will be managed on-site in the same manner as all other wastes in storage.

Typical Form: The "typical forms' provided in Attachment C-A are examples of forms currently in use at CHK. These forms may be revised as needed to respond to changes in regulations and record keeping procedures at CHK.

Value of a Parameter: The "value of a parameter" will refer to the value or a range of values of a parameter as determined by analysis.

Waste Stream: A "waste stream" will refer to wastes from a single generator with similar characteristics or originating form similar processes. Each waste stream will typically be identified for record keeping purposes by a unique number.

1.3 <u>Identification of Wastes</u>: 40 CFR 270.14 (b) (2), 40 CFR 264.13 (a)

1.3.1 <u>Wastes Acceptable for Management:</u>

Materials acceptable for management at CHK will include solid wastes and hazardous wastes. Attachment C-B contains a list of hazardous wastes which may be received at CHK. The hazardous wastes listed in Attachment C-B are referred to by the EPA to indicate if the waste is reactive (R), toxic (T), corrosive (C), ignitable (I), an acute hazardous waste (H), or whether the waste exhibits the Toxicity Characteristic (E). The basis for designating these wastes as hazardous is provided in 40 CFR Part 261, Appendix VII.

The wastes accepted at CHK will vary considerably in both composition and form. Various organic and inorganic constituents may be present in the wastes. Wastes will be liquid, solid or multiphastic. General waste descriptions include hazardous wastes of the following types: contaminated wastewaters, spent catalysts, electroplating wastes, metal-contaminated sludges, spent-solvent residuals, off-specification chemicals, and a variety of other waste types.

Each waste stream will be characterized prior to acceptance for management at the facility following the procedures described in Section 5.0. This pre-acceptance characterization will be used to determine the acceptability of waste streams for management at CHK. Profiles and other analytical data (as required) are maintained in the operating record for three years or longer.

1.3.2 Waste Prohibited from Management:

Materials which will not be accepted for management at CHK include the following:

- Dixon-containing hazardous wastes identified by EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, F027, and F028.
- Regulated radioactive wastes and materials.
- Infectious medical wastes.
- TSCA regulated PCBs.

2.0 Analytical Parameters and Rationale: 40 CFR 264.13 (b) (1) and (2)

2.1 Introduction:

A list of parameters has been developed for which each batch of waste will be analyzed. These parameters are referred to as "mandatory" parameters. Mandatory analyses will be performed on each incoming load of waste, except as discussed in Section 6.0. In addition to performing analysis for the mandatory parameters, the values or a range of values of other parameters may be determined at any time prior to, or during, management of the waste at CHK to more fully define the waste characteristics. These additional parameters will be determined at the discretion of the Technical Manager. Since these parameters are discretionary, they are referred to as "supplemental" parameters.

2.2 Mandatory Parameters:

2.2.1 Mandatory Pre-acceptance Parameters:

Prior to acceptance at Clean Harbors Kansas, LLC, a hazardous waste must first be screened to determine if it is acceptable for management at the facility. This screening, described in Section 5.0, is performed during the pre-acceptance procedures. The pre-acceptance procedures are intended to provide information to allow CHK to decide whether or not to accept a waste stream at the facility. The pre-acceptance phase generally occurs prior to wastes being shipped to the CHK facility.

The pre-acceptance procedures require the collection of information about a waste stream; the information is used to determine if a waste stream is acceptable for management at CHK. The information collected for this purpose includes the values or a range of values of a set of material parameters. Table C.1 contains a list of the mandatory pre-acceptance parameters.

Table C.1
Mandatory Parameters for Waste Analysis

Mandatory Parameter	Pre-Acceptance	Incoming Load
Physical Appearance	X	X
Water Reactivity Screen	X	X
Oxidizer Screen	X	X
pH Screen	X	X
Radioactivity Screen	X	X
Ignitability Screen	X	X
Specific Gravity	X	X
HOC Screen	X	X
Compatibility Evaluation		X

Note: A check (X) indicates that the parameter is mandatory.

Specific gravity will be done on the liquid portion only of otherwise solid waste streams, where liquids are >20%.

2.2.2 Mandatory Incoming Load Parameters:

Upon the arrival of a waste shipment at the facility, procedures will be implemented to confirm that the incoming waste exhibits the same properties as the waste characterized during the pre-acceptance procedures. This confirmation is obtained by analyzing a sample of the incoming load for the same set of mandatory parameters as analyzed during the pre-acceptance procedures. If the results of these analyses are within the allowable tolerance range for each parameter, then the Technical Manager may conclude that the waste shipment essentially has the same properties as the waste characterized during the pre-acceptance procedures. The waste shipment is, therefore, considered to be suitable for management at CHK.

In addition to the mandatory parameters confirming the pre-acceptance evaluation, a compatibility evaluation will be performed on the waste before it is transferred to another tank or container or mixed with other wastes.

The incoming load procedures and the acceptable tolerance ranges for the incoming load parameters are provided in Section 6.0.

Table C-1 provides a list of the incoming load parameters for which the values or a range of values will be determined during the incoming load procedures.

2.3 Supplemental Parameters:

Analyses for supplemental parameters may be performed at any step of the waste management process if the Technical Manager decides that further information on the waste is necessary. Some supplemental parameters are always required for wastes going to specific waste processing units, as defines in Section 2.4.2.

Some examples of supplemental parameters include:

- Reactive cyanides screen,
- Reactive sulfides screen,
- Flash point,
- Bulk density,
- Total organic halogens,
- Heating value,
- Chlorides,
- Percent ash,
- Solvent screen,

- PCB screen,
- Normality,
- Toxicity characteristic leaching procedure,
- Metals analysis, and presence of free liquids.

It may be necessary to use additional analyses performed by a suitable outside laboratory to further characterize a waste stream on a case-by-case basis, at the discretion of the Technical Manager.

A summary of some of the supplemental parameters and the rationales for determining their values or range of values are provided in Section 2.4. Parameters previously listed as mandatory (e.g., for pre-acceptance and incoming loads) may also function as supplemental parameters during various stages of waste management.

2.4 Rationale for Parameter Selection:

2.4.1 Rationale for Mandatory Parameters:

The rationale for selecting each mandatory parameter for waste characterization during pre-acceptance and incoming load procedures is provided below.

Physical Appearance is used to determine the characteristics of a waste which are apparent by visual inspection. This facilitates comparison of the waste with prior waste descriptions. It is also used to detect multiple phases (e.g., liquids and solids or "multiphastic"). A change in physical appearance might be indicative of a change in waste character.

Water Reactivity Screen is used to determine whether the waste has a potential to react violently with water, form potentially explosive mixtures with water, or generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment when mixed with water. Knowledge of whether a waste is water reactive is necessary for safe management of the waste.

Oxidizer Screen is used to identify the potential of the waste to react adversely with organic materials. Identification of a waste as an oxidizer allows for informed decisions regarding safe management of the waste.

pH Screen is used to indicate potential corrosivity and compatibility with other wastes. pH may not apply to certain wastes (e.g., non-aqueous wastes). A knowledge of pH is necessary in order to arrive at informed decisions regarding waste management.

Radioactivity Screen is used to identify regulated radioactive waste streams and to prevent their acceptance at CHK.

Ignitable Screen is used to identify potentially ignitable wastes as a safety precaution and to determine the appropriate management method. During the pre-acceptance procedures, the screen will be supplemented with a flash point test (e.g., ASTM methods D92 or D93) for those liquid materials where the ignitability screen results in a reading exceeding 500ppm. During the incoming load procedures, the results of the Ignitability Screen will be used to indicate if the process generating the waste has changed and if the incoming load matches the description on the waste profile sheet.

Specific Gravity (for liquids) can be used as an aid to determine if the process generating the waste has changed or to prevent the possibility of overloading a tank.

HOC Screen (Bielstein Test) is used to indicate the presence of halogens and can be used as an aid to determine if the process generating the waste has changed.

Compatibility Evaluation is performed to determine whether a waste may be safely stored or processed in a tank or container or mixed with other wastes.

<u>2.4.2 Rationale for Supplemental Parameters:</u>

A partial listing of supplemental parameters, and the rationale which the Technical Manager may consider in their selection, is show below.

Reactive Cyanides Screen is used to determine whether gaseous cyanides may be produced from the waste. Since the mixing of acids with cyanides must only occur under controlled conditions, a determination of the presence or absence of reactive cyanides will be made to allow the appropriate waste management decisions to be implemented.

Reactive Sulfides Screen is used to determine whether gaseous sulfides may be produced from the waste. Since the mixing of acids with sulfides must only occur under controlled conditions, a determination of the presence or absence of reactive sulfides will be made to allow the appropriate waste management decisions to be implemented.

Flash point is a measure of flammability and may be used to determine proper waste management with regard to safe handling methods or land disposal restrictions. A change in flash point may be indicative of a change in waste character.

Bulk Density (for liquids) can be used as an aid to determine if the process generating the waste has changed or to prevent the possibility of overloading a tank.

Total Organic Halogens (TOX) determines the concentration of halogenated organic constituents in a material and may be useful as an aid in waste characterization or as an indicator of a change in waste character.

Heating Value is measured as an aid in waste characterization or to determine if a waste is eligible for fuels blending. The parameter "heating value" is typically measured in units of Btu/lb. Heating value must be performed during pre-acceptance procedures on all hazardous wastes intended for processing through kiln fuels blending.

Percent Ash is used to assist in formulating waste blends.

Solvent Screen is used to screen for the presence of and, when possible, the concentration of solvents in a waste stream. This information is necessary to make waste management decisions such as whether land disposal restrictions are applicable. Solvent screen must be performed during pre-acceptance procedures for all hazardous wastes intended for solvent reclamation.

PCB Screen is used to screen for TSCA regulated PCB material which is not acceptable for management at CHK. PCB concentration will be determined at any time that the Technical Manager suspects or the generator notifies CHK that PCBs may be present in concentrations greater than or equal to 50 ppm. Once

PCBs have been identified in a given waste stream, the PCB screen may become a mandatory parameter for that waste stream.

Normality is used to determine the neutralization requirements for a strongly acidic or basic material. This test is normally performed on aqueous wastes with a pH of less that two (2) or greater than 12.5.

Toxicity Characteristic Leaching Procedure (TCLP) enables determination of the concentration of certain constituents in waste extracts and may be used to identify materials which are subject to land disposal restrictions.

Metals analysis may be performed to determine whether land disposal restrictions are applicable and whether the waste meets the requirements of the facility which will receive the waste from CHK.

Presence of Free Liquids is used to determine if a waste contains free liquids. The absence of free liquids would indicate that a container may be stored in an area without secondary containment; or that the waste, if otherwise meeting all treatment requirements under the land disposal restrictions, may be placed in a landfill for disposal without further treatment.

3.0 Analytical Procedures: 40 CFR 264.13 (b) (1) and (2)

The typical analytical methods used to obtain the values of the parameters of concern are described in this section. As new analytical procedures are developed, these procedures may be adopted and the WAP updated accordingly, as provided in 40 CFR 270.42.

In some situations, analyses by the CHK laboratory may not be necessary or appropriate. Such situations would include:

- When the laboratory analyses are performed by another Laboratory,
- When the analyses and/or information are provided by the generator and provide an understanding of the waste to allow proper storage and handling,
- When a representative sample cannot be obtained (e.g., contaminated debris and equipment, personal protective equipment (PPE), etc.),
- When sampling may not be appropriate (e.g., nonhazardous waste, lab packs, thermometers, 10-day transfer loads),
- When a representative sample cannot be prepared as specified in the analytical procedure.

In these situations, alternative methods of characterizing the waste will be used. Alternative methods may include information sources such as the Technical Manager's or the generator's knowledge of the waste or of the processes generating the waste.

When the generator provides the results of analytical testing performed by an KDHE Certified Laboratory, the report must include certification of what standard analytical method was used to obtain the results. If a non-standard method was used, documentation must be provided to support the validity of the results. All methods of record will follow approved procedures specified in this Waste Analysis Plan.

3.1 Analytical Methods for Mandatory Parameters:

Analytical methods for the mandatory parameters are listed in Table C.2. The methods include standard test methods from EPA and ASTM. In addition to the standard test methods, unique procedures and protocols formulated for the management of hazardous waste by Clean Harbors Kansas, LLC may be utilized. These unique methods, provided in Attachment C-C, have proven to be useful for waste characterization.

Under circumstances where the defined methods may not yield valid data, the Technical Manager may elect to substitute an alternate method for one of those listed in Table C.2 or to modify a method for a particular waste stream. A decision of this sort by the Technical Manager will be documented in the operating record.

Table C.2
Analytical Methods for the Mandatory Parameters

Mandatory Parameter	Methods	Reference/Comments
Physical Appearance	(Refer to Reference/Comments)	The waste or representative sample is inspected and the physical appearance of the waste is recorded, including: color, physical state (solid, semi-solid, liquids, or multiphastic), and layering (single phased, bi-layered, multi-layered).
Water Reactivity Screen	USPCI-2 No applicable reference method for screen	CHK Analytical Procedure 2; Screen for water Reactivity
Oxidizer Screen	USPCI-6 No applicable reference method for screen	CHK Analytical Procedure 6; Screen for oxidizers
pH Screen	SW-846 9040	SW-846 Method; pH of aqueous liquids using probe where the aqueous phase constitutes at least twenty (20) percent of the total volume
	SW-846 9041	SW-846 Method; pH of materials using pH indicator paper when method 9040 is not appropriate
Radioactivity Screen	USPCI-1 No applicable reference method for screen	CHK Analytical Procedure 7; Screen for Radioactivity
Ignitability Screen	ASTM D92	Ignitability open cup screen
	ASTM D93	Ignitiability close cup method
Specific Gravity	ASTM Method D1298	ASTM Method; Specific Gravity of Liquids
HOC screen	SW-846 8270 HRIW-2	CHK Analytical Procedure 2; HOC Screen,reference method is SW-846 8270
Compatibility Evaluation	USPCI-25 ASTM D5058Method A	CHK Analytical Procedure 25; Evaluation of compatibility

1. Clean Harbors and CHK Analytical Procedures and a list of the reference documents are provided in Attachment C-C.

3.2 Analytical Methods for Supplemental Parameters:

Supplemental analyses will be conducted using recognized protocols where available, such as those contained in "Test Methods for Evaluating Solid Waste" (SW-846, in effect as of 2007 or current), or "Standard Methods for the Examination of Water and Wastewater" (APHA), or 40 CFR Part 136 (current edition). Attachment C-C contains a list of the most likely of these various standard analytical methods for some of the supplemental parameters.

CHK may also utilize unique procedures and protocols formulated for the management of hazardous waste, which have proven to be useful for waste characterization. Some of the unique Clean Harbors and CHK procedures are presented in Attachment C-C.

If the CHK laboratory is asked to perform other tests by either generators sending wastes to CHK, or waste management facilities receiving wastes from CHK, these tests may follow a protocol established by the EPA or another standards-setting body, or may be custom-designed specifically for that particular client. In such cases, any supplemental tests which directly impact decisions regarding waste management will be documented in the operating records.

When the Technical Manager decides that supplemental testing is required, the selection of an analytical method will be based upon the property or parameter to be determined and the matrix of the material to be tested. In the selection of an analytical method, it should be noted that the actual analytical procedure used is identical in many cases, regardless of the matrix of the material, only the extraction and preparation steps are different. Consequently, although there are different method numbers for the analysis of water and solid waste or soils, the analytical procedures are the same. Before the Technical Manager relies on the results of an analytical method for waste management decision, the proper quality control and quality assurance provisions must be in place for the analytical method.

4.0 Sampling Methods: 40 CFR 264.13 (b) (3), 40 CFR Part 261, Appendix I

This section presents methods to be utilized by CHK to obtain a representative sample of wastes. These methods will apply to waste generated off-site (when sampled by CHK) as well as facility-generated waste. Samples received for pre-acceptance analysis are typically sampled by the generator or his agent at the point of origin of the manifest, although CHK or Clean Harbors may, on occasion, serve as the generator's agent to perform the sampling. Incoming load samples are typically taken by CHK personnel at the CHK facility, except when a shipment from Clean Harbors or CHK is sampled at the point of origin (see Section 4.5.4). Discussions of the circumstances under which the sampling will be performed are presented in Sections 5.0 through 7.0. The specific sampling methods selected are dependent on both the nature of the waste and the type of container or tank that the waste is in, and will be decided upon prior to sampling.

4.1 Sampling Safety Precautions:

Because of the potential for exposure to hazards, personnel will wear, at a minimum, safety glasses, gloves, hard hat, and protective clothing while sampling. Personnel may check the waste profile sheet and other pre-acceptance characterization data, manifest, or other documents to be familiar with the wastes and ensure that necessary precautions are taken prior to beginning sampling. Additional protective equipment such as face shields, respirators, etc., will be used as needed.

4.2 Sampling Method Reference:

Generally, sampling will be performed using methods described in: "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (SW-846, in effect as of February 2007); Handbook for Sampling and Sample Preservation of Water and Waste water" (EPA-600/4-82-029); Samplers and Sampling Procedures for Hazardous Waste Streams" (EPA-600/2-80-018); or 40 CFR Part 261, Appendix I. Excerpts from "Samplers and Sampling Procedures for Hazardous Waste Streams" are included for reference in Attachment C-D. Due to the variability of waste, personnel performing the sampling may be required to alter a particular method for some situations. In all cases, the goal of the sampling effort will be to obtain a sample that is representative of the whole.

4.3 Sampling Locations:

Samples will be taken from a variety of locations and therefore will require a variety of sampling techniques and devices. Waste may be sampled from storage vessels, such as a tank, drum roll-off box, lugger box, tanker or dump-type truck. Waste may also be sampled from other locations; such as a sump.

Accessibility to the waste will influence the number of and the location from which samples can be taken. Where practical, samples will be taken from locations displaced both vertically and horizontally. The number of samples required depends on the distribution of the waste components in the storage vessel. A number of samples may be taken to address variations in the waste. If examination indicates stratification in the waste, then each layer may be composited in proportion to its estimated volume.

4.4 Sampling Equipment:

Sampling equipment will be used to obtain a representative sample. This equipment may include a Coliwasa, glass rods, Bacon bomb, etc. Because each sampling situation is unique, the equipment and application may have to be modified to ensure that a representative sample is collected and its physical and chemical integrity are maintained. The personnel performing the sampling will be responsible for determining the appropriate sampling apparatus.

4.5 Other Sampling Considerations:

4.5.1 Frozen Shipments or Samples:

Loads may arrive at CHK at temperatures which prevent a representative sample from being obtained. Under such circumstances, the wastes will be allowed to warm until such time as sampling can be performed. Sampling can occur at any temperature provided a representative sample can be obtained.

4.5.2 Cleaning of Sampling Apparatus:

Sampling tools are visually checked to make sure that they are clean before the sample is taken. When necessary, cleaning of sampling equipment is performed as follows.

Solids are removed to the maximum extent possible with a brush, cloth, or other means; the sampling tool is washed with clean water or appropriate cleaning solution; and solids and rinsate are collected and managed as facility generated waste.

4.5.3 Management of Samples after Analysis:

Samples from waste streams will be either returned to the generator or managed appropriately. For example, the sample from a waste stream approved for a given treatment may be similarly treated. Wastes and/or samples from the CHK laboratory may be consolidated either in a container or a lab pack as appropriate. CHK laboratory wastes will be managed on site or shipped off-site for alternate treatment as appropriate.

For accepted waste streams the representative sample, if one was obtained, will normally be retained by CHK for at least 30 days. Generator supplied samples of waste streams which are unacceptable for management at CHK are returned to the generator (or a representative of the generator), managed on site, or shipped to an alternative waste management facility.

To facilitate this process of accumulating samples and laboratory waste, samples which are approved for the same management process may also be consolidated, if compatible, and managed under the provisions of 40 CFR 262.34.

4.5.4 Remote Project Sampling and/or Analysis:

In cases where off-site sampling or analysis is used for the purpose of satisfying the incoming load procedures, a Clean Harbors representative will be at the site to ensure that the provisions of this WAP are observed. For example, this may occur at remediation projects managed by Clean Harbors.

4.5.5 Lab Packs

Since lab packs contain small quantities of multiple wastes, they are not sampled. Instead, the generator or a representative of the generator will provide an inventory of the contents of the lab pack. The inventory will be reviewed for incompatibility of contained wastes and the land disposal restrictions. CHK may sample bulked-up lab pack wastes according to container sampling procedures.

4.5.6 Nonhazardous Wastes:

Nonhazardous wastes will be accepted at CHK. In order for a load of nonhazardous waste to be accepted, a waste profile form must be completed by the generator. Typical examples of these forms are provided in Attachment C-A. The profile form utilized has the generator attest that the material is nonhazardous. These wastes will be inspected for physical appearance, at a minimum. Other information, including analytical data, will be obtained as necessary to ensure proper waste management.

4.5.7 Vitrified, Cemented, and Other Materials Exhibiting High Structural Integrity:

There are several wastes which do not allow representative sampling. For example, structural steel, tanks, pipe, cement, glass, filter cartridges, and several other materials will be managed which do not allow the implementation of normal sampling protocols. Of necessity, these materials must be managed on a case-by-case basis.

4.5.8 Regulatory Cleanups:

When a regulatory agency, or their contractor, undertaking a clean-up of a site (e.g., EPA or Kansas Department of Health and Environment) has established the waste characterization information, CHK may utilize this characterization in lieu of pre-acceptance analytical and incoming load analytical information.

5.0 Pre-Acceptance Procedures: 40 CFR 270.14 (b) (2), 40 CFR 264.13 (a), and 40 CFR 264.12 (a)

The purpose of the pre-acceptance procedure is to determine if a waste is acceptable for management at CHK. If it is determined that the waste can be managed at CHK, the generator is notified and may schedule shipment of the waste.

All hazardous wastes generated off-site and proposed for management at CHK will be subject to these procedures. For situations where sampling and analysis cannot be performed due to the nature of the waste or container (e.g., PPE, debris, lab packs, etc.), the circumstances will be documented in the operating record and proper management of the waste will be determined by knowledge of the waste or of the process generating the waste.

5.1 Typical Pre-Acceptance Procedures:

5.1.1 Waste Characterization:

The decision to accept a waste for management at CHK will be in part based on a characterization or profile of the waste. At a minimum, this characterization is accomplished through knowledge of the waste of laboratory analysis of the waste for the mandatory pre-acceptance parameters. The Technical Manager may rely on a characterization performed at another facility owned or operated by Clean Harbors in lieu of duplicating the characterization a CHK.

The activities involved with characterizing a waste at CHK for pre-acceptance purposes are provided below.

Requirements of the Generator: The generator of a waste stream will be required to provide some information on the properties of the waste. The information may include:

- The chemical and physical data requested on the Waste Profile Sheet (WPS) (A typical WPS is shown in Attachment C-A. An equivalent form approved by CHK may be used in lieu of a WPS.),
- Results from the analysis of a representative sample by a laboratory with an appropriate QA/QC plan. If the generator supplies the results of analysis for the mandatory parameters, a representative sample from the generator may not be required, and/or any other supporting documentation as appropriate (e.g., Material Safety Data Sheets, notification and/or certification as required by 40 CFR Part 268).

CHK will review the information provided by the generator for acceptability. If necessary or appropriate, CHK will request additional information from the generator including process information, a representative sample, or the results from other analyses. When the information is considered acceptable, the waste will be evaluated for management at the facility (Refer to Section 5.1.2). The information will be considered acceptable when a reasoned evaluation of the waste can be performed in accordance with Section 5.1.2.

Analysis for Parameters (Mandatory and Supplemental):
CHK may confirm certain waste characterization data supplied by the generator by analyzing the representative sample (s) of the waste for one or more of the mandatory pre-acceptance parameters.

The Technical Manager may also require that analyses be performed for certain supplemental parameters. Analyses for these supplemental parameters may be performed at CHK or a suitable KDHE Certified Laboratory.

The need for analyses for the supplemental parameters will be based on:

- The completeness of the chemical and physical characterization of the waste,
- the completeness of the description of the process generating the waste,
- The results of pre-acceptance analyses performed at CHK or by anotherKDHE Certified Laboratory, and
- The Technical Manager's experience and judgment.

5.1.2 Evaluation:

After completing the pre-acceptance waste characterization, the Technical Manager will determine the acceptability of the waste for management at CHK. This determination will be based on permit conditions, availability of proper treatment techniques, and storage and off-site disposal capacities.

The Technical Manager is responsible for making the decision to accept or reject a waste based on an evaluation of the information and data gathered during re-acceptance procedures. After this decision is made, the generator will be notified of the decision to approve the waste for management, to approve the waste under certain conditions (e.g., packaging, etc.), or to reject the waste for management.

If the waste is to be received from a foreign source, the Kansas Department of Health and Environment will be notified in writing at least four weeks in advance of the first scheduled shipment, in accordance with 40 CFR 264.12 (a). This notification will include generator's name, address, quantity of hazardous waste, and EPA hazardous waste code(s).

5.2 Recharacterization Frequency:

CHK will re characterize incoming waste streams at least every two (2) years. Any incoming load accepted at CHK must have been characterized (or re characterized) within the last twenty-four (24) months. A sample of an incoming load may be used for the re characterization. CHK will also repeat the pre-acceptance characterization if:

- A generator notifies CHK that the process generating the waste has changed
- The incoming load is outside of the acceptable tolerance range provided in Table C.3 (unless the discrepancy can be resolved as described in Section 6.1.5, Incoming Load Evaluation), or
- The Technical Manager suspects that a waste shipment differs from the pre-acceptance characterization (the generator may be contacted prior to re characterizing the waste).

In the event that a Kansas-generated waste changes such that the re characterization involves assigning or removing a waste code, the related analyses will be performed at a Kansas certified laboratory.

6.0 Incoming Load Procedures: 40 CFR 270.14 (b) (2), 40 CFR 264.13 (a), (b) (4), and (c)

The purpose of these incoming load procedures is to determine if a waste shipment (incoming load) arriving at CHK matches the characterization of waste on which the pre-acceptance evaluation was based. Wastes which correspond to the waste characterization documented during the pre-acceptance procedures may be accepted for management at CHK. This section provides the procedures for determining if a significant difference exists between the pre-acceptance characterization and the waste shipment.

On occasion, a generator will ship a load before pre-acceptance procedures are completed. Incoming loads that have not been qualified through pre-acceptance procedures prior to arrival at CHK will not be accepted until the pre-acceptance procedures described in Section 5.0 have been performed. In the case of loads of containers, the containers may, before or after they are unloaded from the transport vehicle, be sampled for analysis of the mandatory pre-acceptance parameters. The containers will remain staged in one or more container management unit (s) until the pre-acceptance procedures are completed. Under these circumstances, the same analytical results may be considered both as re-acceptance and incoming load analyses.

The procedures described in this section apply to hazardous waste generated off-site which will ultimately be managed at CHK. Facility generated wastes are not subject to the incoming load procedures described in this Section. Wastes received at CHK only for the purpose of transfer to another facility in accordance with 40 CFE 263.12 and 264.1 (g) (9) are also not subject to the incoming load procedures. These 10-day transfer wastes may remain at the site for a period not to exceed ten (10) days prior to continuing the journey to the designated treatment, storage, or disposal site. 10-day transfer loads remain "in transit" during the entire stay at the site. These wastes may be off-loaded and transferred to another vehicle. Because these 10-day transfer loads are never accepted into the CHK waste management system, no analyses are performed on the loads. However, 10-day transfer wastes are tracked using the waste tracking system. 10-day transfer loads generally remain on the truck or in the loading dock areas, although the wastes may occasionally be placed in a CMU temporarily prior to reshipment off-site. At no time will the total waste volume in any CMU exceed the permitted storage capacity.

For situations where sampling and analysis of an incoming load cannot be performed due to the nature of the waste or the containment vessel (e.g., debris, PPE, lab packs, etc.,) the circumstances will be documented in the operating record and proper management will be determined by knowledge of the waste or of the process generating the waste.

6.1 Typical Incoming Load Procedures:

The events which typically occur during the incoming load procedures are described below. The events discussed are not necessarily performed in the sequence presented.

6.1.1 Incoming Load Arrival:

Incoming load evaluation will be performed after arrival of the waste shipment at CHK. An incoming load will remain in the receiving area, except for containers to be managed in the container management units, until any significant discrepancies have been resolved. Shipments of containers may be sampled before they are unloaded, or they may be unloaded at the container management units for staging and sampling.

Wastes may remain on the transport vehicle or in a staging area for up to 72 hours while awaiting completion of acceptance procedures. If incoming load procedures are not completed within that time, the containers will be placed in a container management unit, segregated according to the information available from the manifest, Waste Profile Sheet, and other documentation. In the event that subsequent information (e.g., analytical results) indicates that the material is incompatible with the other wastes stored in that CMU, the container will be moved to an appropriate CMU. The Waste Tracking System will record the location and date of acceptance for each container received at the site.

6.1.2 Manifest Review:

Incoming waste shipment manifests are subjected to a review for completeness. A typical manifest is shown in Attachment C-A. Information about the generator, the waste, and the piece count, volume or weight will be checked. A significant discrepancy between the manifest and the actual shipment is defined as:

- For bulk waste, variation greater than ten (10) percent weight or volume,
- For batch wastes, any variation in piece count, such as a discrepancy of one drum in a truckload, or
- Any significant variation in waste type.

Discrepancies may be resolved by a review of the records maintained at CHK or through discussion with the generator, transporter, or sales representative. Corrections of significant discrepancies in the manifest are made with the concurrence of the generator and are initialed and dated by the individual making the corrections.

If a significant discrepancy in waste type cannot be resolved the affected wastes will be rejected. Causes for rejection can include, but are not limited to, variance from expected constituent concentrations and variance from expected physical characteristics. If a significant discrepancy in piece count of volume cannot be resolved, the load may be accepted or rejected. If the load is accepted, CHK will notify the Kansas Department of Health and Environment in accordance with 40

CFR 264.72 (b), and will submit an exception report. The decision to reject a waste load is made by the Facility Manager or his designee. If a waste is rejected, it will be returned to the generator or sent to an alternative facility agreed to by CHK and the generator.

6.1.3 Inspection, Sampling and Analysis:

Analysis will be performed as outlined in the WAP on the incoming load for parameters listed on Table C.1. The methods of sampling and sample preparation will vary depending on the physical state of the waste and the type of container in which the waste shipment arrives. Samples for incoming load analysis, when sampling is appropriate, will normally be retained at the CHK laboratory for at least seven (7) days after analysis.

Bulk Loads of Liquid, Solid, or Multiphastic Wastes:

Bulk liquid, solid, or multiphastic wastes shipped to CHK will be inspected and, where appropriate, sampled for laboratory analysis. The values of the incoming load parameters will be determined by the analysis of a sample of the shipment.

An exception to this will be where multiple bulk loads of a single waste stream are received from a single source (e.g., a major site clean-up of contaminated material or a large volume generator). These shipments may arrive by rail in rail cars, or by road in bulk containers (e.g., end-dump trucks or intermodal containers). In either case, samples from twenty (20) percent of the bulk containers will be analyzed for the incoming load parameters. These samples may be obtained either when the wastes are transferred into the bulk containers or at the CHK facility prior to unloading. The contents of bulk containers will, at a minimum, be inspected for physical appearance.

Containers: Each shipment of containers is checked against the manifest to confirm piece count and type of container. Containers will be checked for proper labeling and markings and to see that they are in acceptable condition (i.e., not deteriorated, damaged, corroded, leaking, or bulging). Containers may be sampled before or after off-loading.

During the incoming load procedures, the contents of a minimum of ten (10) percent of the containers from a waste stream will be sampled. The samples may be composited and the values of the incoming load parameters will be determined by analysis of the composite.

One exception to this will be where multiple waste streams from one generator have been pre-accepted into the same management category. A composite of a minimum of ten percent of all such drums or other containers on the same incoming load may be made for the incoming load analysis.

Another exception will be multiple generators who produce similar waste streams by a similar process. When such waste streams are received on the same incoming load, the contents of a minimum of ten percent of all containers form such waste streams will be sampled and composited. The values of the incoming load parameters will be determined by analysis of the composite as if the composite were from a single generator's waste stream.

Containers will remain closed except during sampling procedures and when adding or removing wastes. Additional container storage and treatment considerations, including provisions for visual inspection, are provided in Section 7.1.1.

<u>6.1.4 Customer File Review:</u>

The hazardous waste manifest or nonhazardous waste form will be compared to information contained in the customer file for items such as:

- Approved management method (s),
- Required analysis,
- Recommended supplemental analyses (if any),
- Pre-acceptance analysis data,
- Available test results from previous incoming loads, and
- Any other pertinent information

6.1.5 Incoming Load Evaluation:

Analytical results for the incoming load parameters are recorded on the CHK Receiving Report (typical form shown in Attachment C-A) and compared to the corresponding pre-acceptance analysis. Table C.3 lists the parameters whose values are determined during incoming load procedures, and the acceptable range of variation, between the value of a parameter determined at pre-acceptance and at incoming load, within which a waste may be accepted. For each parameter, if the difference between the values of a parameter determined during pre-acceptance and incoming load procedures is within the acceptable range, the waste shipment will be deemed the same (conformance) as the waste accepted for management at CHK during the pre-acceptance procedures. If the difference between the values of a parameter determined during the pre-acceptance and incoming load procedures is outside of the acceptable range, the waste shipment will not be deemed the same (nonconformance).

Table C.3
Acceptable Tolerance Ranges
For Incoming Load Analyses

Parameter	Tolerance Range
Physical Appearance	Similar waste character
pH Screen	+/- 1.5 ph units
Specific Gravity	+/- 15% (liquids and sludges)
Water Reactivity Screen	Positive to negative, only
Ignitability Screen	Positive to negative, only
Radioactivity Screen	Negative is the only acceptable result
Oxidizer Screen	Positive to negative, only
HOC Screen	Positive to negative, only

Notes:

1. The inherent variability of the physical appearance of wastes does not allow quantification of the tolerance range. The inspection for physical appearance is performed during the incoming load procedures to indicate a significant change in the nature of the waste (e.g., a liquid rather than a solid) which may indicate a change in the composition or the process generating the waste.
2. The pH is determined for aqueous liquids or free liquids associated with solids or multiphasics.
3. If the results of the screen are positive during the pre-acceptance procedures, the results during the incoming load procedures can be either positive or negative. If the results of the screen are negative during the pre-acceptance procedures, the results during the incoming load procedures can only be negative (i.e., a positive result is outside of the acceptable tolerance range)

An apparent nonconformance may be resolved before the waste is rejected or re characterized. One or more of the following sources of information may be used to resolve an apparent nonconformance:

- The generator's knowledge of the waste or of the process generating the waste,
- The Technical Manager's knowledge of the waste or of the process generating the waste in light of the pre-acceptance characterization and any additional information in the customer file or accompanying the waste shipment (e.g., manifest, Material Safety Data Sheet, etc.), or
- Additional laboratory analysis.

Resolution of any nonconformance will be documented in the operating record. Nonconformance of waste shipments which cannot be resolved will be documented in the operating record. Wastes found to be nonconforming will be rejected or re evaluated prior to acceptance. If the generator concurs with the re evaluation, the waste can be approved for acceptance. If the generator rejects the evaluation, the waste will be returned to the generator or sent to an alternate facility of the generator's choosing.

Incoming load evaluation is aided by the use of Figure C.1. This figure is intended to serve only as a guide in the decision-making process.

For lab packs, the Incoming Load Procedures including a piece count, inspection of drum numbers and identification, and a review of the inventory list provided in the accompanying paperwork to verify that the manifest and pre-acceptance information match.

6.2 Waste Material Transfer and Tracking:

Waste tracking numbers will be assigned by CHK upon arrival at CHK. Waste tracking information is maintained as part of the operating record. Internal tracking and recording of waste movement includes:

- Waste identification,
- Arrival date,
- Weight and/or quantity of wastes received,
- Current and previous storage locations on-site; and
- Recording of waste management after receipt.

The Waste Tracking report will be generated for each day that waste is moved and as necessary will be printed and made available to site personnel and inspectors. Historical waste tracking information will be maintained on-site as part of the operating record.

7.0 Storage, Treatment or Other Waste Management Activities:

Management of a given waste within the facility which results in a change of its character may make the waste subject to additional inspection, sampling, and analysis. Many of the analyses needed for storage, treatment or off-site disposal are performed during either the pre-acceptance or incoming load procedures specified in Sections 5.0 and 6.0 of the WAP. Additional analyses may be conducted, before off-site management of the waste, if there is reason to document that the waste may have significantly changed during storage or treatment or to confirm compliance with the restrictions on land disposal contained in 40 CFR Part 268.

The waste management process for which periodic sampling and analysis may be applicable includes:

- Storage, consisting of containers and tanks;
- Treatment, including blending and treatment in containers and container management activities; and
- Off-site disposal, consisting of shipment of wastes to a landfill, injection well, etc.

The analytical procedures for each of these waste management processes is described separately blow. For situations where sampling and analysis cannot be performed due to the nature of the waste or container (e.g., PPE, debris, lab packs, etc.), the circumstances will be documented in the operating record. In this case, the Technical Manager will determine proper waste management based on knowledge of the waste (e.g., an inventory of the contents of a lab pack) or of the process generating the waste.

7.1 Storage

7.1.1 Storage in Containers:

In addition to the incoming load procedures for containers, the following considerations for storage in containers will be observed.

Visual inspection: For containers placed in the container management units for storage or treatment at CHK, ten (10) percent of the shipping containers from a waste stream are sampled during the incoming load procedures (this does not apply to wastes which cannot be sampled such as lab packs, debris, etc., or transshipped wastes destined to another waste management facility). The exterior of all containers is visually inspected during unloading, and subsequently will be inspected in accordance with the Inspection Plan (Section F). The contents of all containers that are empties, mixed, or otherwise processed are subject to visual inspection at least once prior to processing.

<u>Storage Areas</u>: Following unloading, hazardous wastes in containers are stored in areas equipped with secondary containment.

<u>Compatibility</u>: Once they have been unloaded, analyzed, and accepted, wastes are segregated to ensure that incompatible wastes are not stored together. Even if Incoming Load Procedures are not completed within 72 hours, containers will be placed into CMU's, segregated according to information from the manifest, Waste Profile Sheet, and other documentation. If subsequent analytical results or other information indicate that the waste may be incompatible with other waste in that CMU, the waste will be moved into an appropriate CMU.

<u>Waste with Ignitable and Reactive Characteristics:</u> Ignitable and reactive wastes are identified through the pre-acceptance and incoming load procedures described in the WAP and by information submitted by the generator, Wastes identified as reactive will be managed so as to ensure that these wastes do not contact potentially incompatible wastes. Even if Incoming Load procedures are not completed within 72 hours, containers will be placed into CMU's, segregated according to information from the manifest, Waste Profile Sheet, and other documentation. If subsequent analytical results or other information indicate that the waste may be incompatible with other wastes in that CMU, the waste will be moved into an appropriate CMU.

7.1.2 <u>Storage in Tanks:</u>

In addition to the incoming load procedures for waste in storage tanks, the following considerations will be observed.

Compatibility: Wastes added to the tanks must be compatible with the contents of the tank and the material of construction of the tank. A compatibility evaluation as detailed in Attachment C-C (USPCI-25) will be performed prior to transferring a waste into a tank.

Waste with Ignitable, Corrosive and Reactive Characteristics: Bulk ignitable, corrosive and reactive wastes are identified through the pre-acceptance and incoming load procedures and by information submitted by the generator (e.g., manifest, notification, etc.). Liquid wastes which exhibit the characteristic of ignitability will be placed in appropriate tanks for storage and/or treatment at the facility. Reactive wastes will not be placed in the tanks or tanks systems for treatment, but may be stored in the tanks if the waste is protected from any material or conditions that may cause the waste to react, or if such storage in the tanks is used solely for emergency purposes.

7.2 Treatment:

Analyses which support the treatment processes available at CHK may be divided into three categories, each with a specific purpose:

- Pre-treatment analyses confirm that the waste falls within the selected process design parameters and may allow improvement of the process conditions;
- In-process analyses are performed as needed to control the process and to monitor progress; and

- Post-treatment analyses may be performed as needed to confirm that treatment is successful and that the characteristics of the process effluent are such that it can be sent to the next step (e.g., disposal, further treatment, discharge, reuse, etc.).

7.2.1 Blending:

The process of blending waste is performed to produce a mixture which can be used as a supplemental fuel for boiler, industrial furnaces, lime and cement kilns, or similar operations. The blended wastes may also be incinerated. In this process, wastes containing sufficient heating values will be blended with other suitable wastes. Pre-acceptance analyses are used to determine the acceptability of each waste stream for the blending process. Additional analysis for heating value will be performed during pre-acceptance procedures for all hazardous wastes destined for supplemental fuels. The heating value of supplemental fuels sent to BIF's that have not obtained certification of compliance with the BIF requirements will comply with the requirements of the 40 CFR 268 or applicable state law, whichever is more stringent.

In process analyses may be performed to monitor and characterize the intermediate mixture. Post-treatment analyses may consist of those tests necessary to ensure that the blended waste mixture is within the final product parameters. The final product parameters are based on the permits and needs of the facility which will receive the product from CHK. For example, if the facility which will receive the product has specifications for a minimum heating value and maximum chlorine content, then the blend requirements will be a function of these specifications. Analytical data provided for waste determination and burning will be performed by a Kansas certified Laboratory .

7.2.2 Container Management Activities:

Container management activities will include the following. Due to the nature of these treatments, supporting analyses are not typically required except as discussed below.

- Lab Pack Container Repackaging: Compatible Lab packed wastes may be consolidated from several smaller containers into larger container as a source reduction. These larger containers are then shipped offsite for treatment, recycling, incineration, kiln fuel use, or other off-site management.

treatment is complete or to determine that treatment product requirements have been met. . Analytical data provided for waste determination and burning will be performed by a Kansas certified Laboratory .

7.3 Off-site Management:

Many of the analyses needed for off-site management are performed during either the pre-acceptance or incoming load procedures. Additional analyses may be conducted if there is reason to document that the waste may have significantly changed during storage or treatment or to confirm compliance with the land disposal restrictions when applicable.

7.4 Other Considerations:

7.4.1 Lab Packs:

Lab Pack inventories will be reviewed during the incoming load procedures for consistency with shipping papers and the manifest, incompatibility of contained materials, and land disposal restrictions. Since lab packs contain may small quantities of individual materials, they will not be sampled. All lab packs will be visually inspected, and at least ten (10) percent of the lab packs received will be opened and visually inspected. The contents of lab packs that are decanted and bulked into larger containers will then be subject to container sampling procedures as facility generated wastes. A record of all on-site movement of lab pack wastes will be part of the waste tracking system.

7.4.2 Management of Facility Generated Wastes:

Examples of facility generated wastes include:

- Sump residues;
- Clean-up from spills and decontamination of waste management units;
- Floor sweepings from hazardous waste management units;
- Wash waster;
- Residue from in-line basket strainers or other process related ancillary equipment;
- Personal protective equipment;
- Laboratory wastes;
- Tank bottoms;
- Used oil;
- Other solid waste generated from the management of a hazardous waste; and
- Other miscellaneous materials originating from a waste generating process (e.g., solvents or degreasers from the maintenance area, etc.).

Any hazardous wastes generated at the facility will be managed in accordance with the provisions of the WAP (with the exception of the incoming load procedures) and with CHK acting as the generator. Any hazardous wastes generated at the facility that are stored on-site in containers for less than ninety (90) days will be managed in accordance with 40 CFR 265.34.

Where the facility generated waste is traceable to a known waste generating process or segregated storage area (such as a container management unit or an individual tank), traceable codes are carried on CHK wastes. Where the facility generated waste is not traceable, a sample of the waste will be characterized through the pre-acceptance procedures, provided in Section 5.0 of this WAP, to determine proper management. When laboratory analyses are necessary to assign or remove a waste code to site-generated wastes, those analyses will be performed at a Kansas certified laboratory.

Facility generated waste will be collected and placed in tanks or containers. A compatibility evaluation will be performed if the facility generated waste is added to a tank or container already containing waste.

7.4.3 Change of Tank or Container Service:

A change in service of a container, tanks system, or other equipment (i.e., placing a waste which is incompatible with the previous contents) will only occur if the cleaning procedures described below are followed. The container or tank will be rinsed with a neutral or mutually compatible material. This material can be other wastes. The rinse can also be accomplished by filling the container or tanks with other wastes. Upon removal of the "rinse", the container or tank will be considered ready for the change in service. Tank entry and inspection will be performed as necessary. Material in the tank will maintain all listed codes between tank cleanings.

A change in service from hazardous waste to non-hazardous waste treatment or storage will involve slightly different cleaning procedures. The unit will be emptied of waste and cleaned using whatever means necessary (e.g., brush, sweep, scrape, wash, rinse, etc.) to remove residuals. When the unit shows no visible evidence of contamination, the unit will be determined to be cleaned sufficiently to enable non-hazardous waste use. As an extra precaution, the first three volumes of non-hazardous waste run through the unit following cleaning will be managed as hazardous waste carrying the codes that had been contained in the tank previously. Subsequent batches of non-hazardous waste will be managed as non-hazardous.

For units that are not amenable to the cleaning described above, the facility will run three volumes of waste or a cleaning agent through the unit prior to managing subsequent wastes as non-hazardous. For equipment, the facility will either triple rinse the equipment with a cleaning agent of non-hazardous waste, or will run three volumes of waste or cleaning agent through the equipment prior to managing the subsequent wastes as non-hazardous.

The facility may, on occasion, opt to manage non-hazardous wastes through a hazardous waste unit that has not been cleaned. Under these circumstances, CHK will manage those non-hazardous wastes as hazardous, in accordance with 40 CFR 261.3.

7.4.4 Other Management Activities:

Other waste management activities which will take place at CHK will include:

- Transferring drummed solids into gondolas for safer and more economical transport to landfill facilities where this material will be disposed;
- Transferring drummed liquid into tanker trucks for off-site shipment and disposal;
- Transferring material from drums that show signs of deterioration to new drums, or transferring incinerables from steel drums to approved poly drums to allow easier incineration; and
- When shipping requirements allow, repackaging friable solids to be disposed in bulk processes into fiber boxes or bags that better accommodate the disposal handling technology.

8.0 Quality Assurance Plan: 40 CFR 264.13

8.1 Introduction:

The QA/QC measures described herein will help to ensure that the data provided by the laboratory analysis performed at or for CHK are technically sound and statistically valid.

The data generated by the laboratory in conjunction with the waste analyses will be used to determine certain parameters of the wastes to be managed at CHK. The handling and treatment procedures and determination of treatment efficiency will be based on these data.

The processing of waste and corresponding analytical requirements during the management of wastes at the facility (i.e., from pre-acceptance characterization through shipment off-site) are described elsewhere in this WAP (refer to Sections 5.0 through 7.0). The terms used in this section will have the same meaning as provided in SW-846 ("Test Methods for Evaluating Solid Waste," EPA, in effect as of 2007).

8.2 Laboratory Organization:

The lab will generally be organized as illustrated in Figure C.2. This organization may be altered as workloads, equipment, and methodologies change.

8.3 Quality Assurance Objectives:

The quality assurance objectives of the WAP are to provide data that are of known and documented quality. The mandatory parameters for which analyses will be performed during the pre-acceptance and incoming load procedures are listed in Table C.1. Table C.4 lists the precision and accuracy goals for the mandatory parameters.

Other supplemental analyses may be performed, as dictated by operational requirements. If supplemental analyses are performed, the quality assurance objectives will be as defined in the analytical method used or as developed by CHK/Clean Harbors Kansas LLC.

Table C.4
Precision and Accuracy objectives for the Mandatory Pre-acceptance and Incoming Load Parameters (for waste samples)

Measurement Parameter	Precision	Accuracy
Water Reactivity Screen	pos./neg.	N/A
Oxidizer Screen	po./neg.	N/A
pH Screen	+/-2 pH units	+/- .5 pH units
Radioactivity Screen	po./neg.	NA
Ignitability Screen	po./neg.	NA
Specific Gravity	+/- 20%	100 +/- 20%
HOC Screen	po./neg.	N/A

Note:
1. If supplemental analyses are performed the QA/QC defined in the method will be used.
2. CHK cannot evaluate the accuracy data on this test due to lack of calibration materials. The meter will be calibrated at least annually.

8.4 Sampling and Analytical Procedures:

8.4.1 Pre-Acceptance:

Information about pre-acceptance sample will be entered into a sample record. The sample record will be tracked by Profile or barcode Number or such other numbers as may be deemed appropriate. This number will be used to track the sample information through the record keeping system. The sample container and any analytical results are to have this number to help track the information about the sample. The parameters for which the values will be determined during the pre-acceptance procedures are provided in Section 2.0. The analytical methods used to determine the values of these parameters are provided in Section 3.0.

8.4.2 Incoming Load:

The procedure for obtaining a representative sample of a waste during the incoming load period is provided in Section 4.0 of the WAP. Section 4.0 includes descriptions of the types of sampling equipment and other considerations regarding sampling.

When a suitable KDHE Certified Laboratory performs the incoming load analysis, CHK will review the report for certification of what standard analytical method was used to obtain the results. If a non-standard method was used, documentation must be provided to support the validity of the data.

8.5 Calibration Procedures and Frequencies:

Any analytical instrument used to generate data must be calibrated to ensure that accuracy is within acceptable limits. The laboratory analyst is responsible for ensuring that the proper standard is used in performing the calibration.

The frequency of calibration is determined by several factors (e.g., instrument stability, accuracy of data required, methodology employed). Calibration schedules are determined around a nominal period and increased/decreased to fit the requirements of a given test. The calibration schedule is always biased toward an increased frequency.

Unless otherwise stated in the QA/QC Plan, the method and frequency of calibration will be performed as defined in the analytical methods used.

8.5.1 pH/Selective Ion Meters:

The pH meter will be standardized at two points with reference buffer solutions (generally pH4, pH7 or pH 10). The calibration will be checked with another buffer from a source different from the calibration buffers; this buffer will be called the Continuing Verification (CCV) buffer. The CCV buffer will be read after initial or any subsequent calibration reading with an acceptable tolerance of +/- 0.5 pH units from the true value. If the CCV reading is not within the tolerance limit the instrument will be recalibrated. The CCV will be reanalyzed after each sample analysis and recalibration will be required if the reading fails outside of the +/- 0.5 pH units tolerance limit. The pH meter will be calibrated daily prior to the start of any pH measurements.

8.5.2 Balances:

Balances will be of a type appropriate for the accuracy of the weighing to be performed. Balances available may include single pan analytical and single pan top-loading. The analytical balances will be placed on a stable surface and the level checked and adjusted as necessary.

Balance calibrations will be checked with standard weights as appropriate for the routine use of that balance. The results of these checks will be recorded. Performance of any service will be recorded in the instrument log book.

8.5.3 Other Instrumentation:

CHK will include a laboratory equipped to perform, at a minimum, the standard test methods and unique test methods listed in Table C.2. Calibration procedures and frequencies for instrumentation not listed in the WAP will be performed according to the manufacture's instructions or the applicable reference methodology.

8.6 Analytical Procedures:

Standard analytical methods or methods developed by CHK and Clean Harbors will be used for determining the value of selected parameters. The Technical Manager may make minor modifications to the method, as necessary, while keeping within the intent of the method. The Clean Harbors and CHK analytical methods are provided in Attachment C-C. The standard methods will be obtained form such sources as the following.

- "Test Methods for Evaluating Solid Waste", SW-846, in effect as 2007 or most current,
- EPOA Office of Water and Waste Management, Washington, D.C 20460.
- "Annual Book of ASTM Standards", American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103

- "Standard Methods for the Examination of Water and Waste Water", American Public Health Association.
- "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, EPA, Environmental Monitoring and Support Lab, Cincinnati, Ohio 45268.
- Title 40 of the Code of Federal Regulations, Parts 260-268 (current edition).

8.7 Data Reduction, Validation, and Reporting:

In the process of relating a measurement to the concentration of an analyte in the sample, certain guidelines must be followed to avoid distortion of the analytical value through the calculation process. Calculations will follow generally accepted rounding and significant figure rules. Raw data and calculations are recorded by the analyst on a data sheet. The data sheet will include:

- The test performed;
- Sample information such as volume, weight, and dilutions;
- The analyst's identity;
- The date samples were prepared and/or analyzed; and
- Sample results.

8.8 Internal Quality Control Checks:

8.8.1 Methods:

The laboratory uses only quality control methods which are based on those recognized by sources such as National Institute of Standards and Technology (NIST) or American Society for Testing Materials (ASTM).

8.8.2 Spike Samples:

The sample resulting from the addition of a known amount of analyte into a portion of a previously analyzed sample is called a spike sample. The data resulting from the analysis of the spike sample can be evaluated to determine the accuracy of the analytical method as well as the impact of interferences in the sample. Accuracy is determined by percent recovery comparing the result of the analysis of the spike sample with the results of the original sample. Poor recoveries may indicate interferences in the sample or an inappropriate application of a test for that sample type.

When appropriate, a method should be evaluated using a spike control (method spike). A spike control is a blank matrix (deionized water or similar analyte-free matrix) spiked with a known amount of the analyte (s) of interest. The recovery of the analyte will be maximized under these conditions and will indicate the performance of the method based upon recovery under ideal conditions.

After a method has been proven effective using a spike control, the ongoing process is monitored with spike samples. Spike samples should be analyzed at a minimum frequency of five (5) percent (e.g., one (1) of every twenty (20) samples). For tests that are run infrequently, spikes should be analyzed with every batch. To eliminate systematic errors, the source of the spike material should be independent of the analytical method's routines material.

After a sufficient number of recoveries for a given parameter have been accumulated, control limits will be established. The precision and accuracy objectives provided in Table C.4 will be updated periodically to reflect the new control limits. Recoveries which exceed the control limits indicate the need to reanalyze the associate sample batch. Exceptions may be documented by respiking/reanalyzing and written comment.

8.8.3 Replicate Samples:

Replicate samples help evaluate the precision of a method and quantify the uncertainty of an analytical value. Replicates can exist in two forms, replicate sample analysis or replicate spiked sample analysis. If no analytes are expected to be found in an analysis it is better to choose to do replicate spiked samples.

Replicate samples, usually a duplicate, are to be analyzed at a minimum frequency of 5% (1 of every 20 samples). For tests which are run infrequently (e/g/, once a month), duplicates will be analyzed with each batch.

After a sufficient number of replicates for a given parameter have been accumulated, control limits will be established. The precision and accuracy objectives provided in Table C.4 will be updated periodically to reflect the new control limits. Replicates which exceed the control limits indicate the need to reanalyze the associated sample batch. Exceptions may be documented by respiking/reanalyzing and written comment on the laboratory bench sheet.

8.8.4 Blanks:

Blanks demonstrates that the method is free from interferences of allow the analyst to monitor background and keep it form reaching levels at which would interfere with the detection and quantification of the target analytes. However, not all methods are amenable to blanks (e.g., specific gravity).

Blanks are to be run once in every twenty (20) samples or with each sample batch, whichever is more frequent. Analyte concentration in the blank should not exceed five (5) times the method detection limit.

If the level of blank contamination is constant and can be controlled, appropriate control limits can be established. Blank valued must be recorded on an ongoing basis in this case.

8.8.5 Calibration Materials:

Quantifying the amount of an analyte in a sample is dependant on the reference used. A value can only be as good as the standard to which it is compared. Calibration materials must be of known purity and composition.

When a laboratory standard is created, it must be compared to an existing standard to insure it is within acceptable tolerances. This may involve the use of a Standard Reference Material (SRM) from the National Institute of Standards and Technology (NIST), EPA, or another source which can be tracked back to NIST or EPA.

Quality control samples from the EPA or similar agency/organization (e.g., NIST) can be used to evaluate the accuracy of a standard and/or instrument calibration.

8.9 Performance and System Audits:

8.9.1 Performance Audits:

These audits involve the use of blind samples given to an analyst to evaluate the accuracy and precision of an analysis the term blind (sometimes called single blind) means the analyst is aware that these samples are spikes, but is not aware of the concentration. These audits will be coordinated by the Technical Manager on an annual basis.

Major defects (e.g., a finding of a chemist not analyzing quality control samples, improper calibration procedures being used) which are discovered by these studies are investigated and appropriate corrective action applied.

8.9.2 System Audits:

System audits evaluate the laboratory staff's capability to produce good data. These audits allow the Technical Manager to judge whether or not the quality control practices are being followed and are effective. The system audits are conducted by the Technical Manager at least annually. The results of these audits require a response form the laboratory staff listing any corrective actions taken to remove defects.

8.10 Preventative Maintenance:

The manufacture's manual for a particular instrument will be consulted for operating instructions. Maintenance schedules recommended by the manufacturer will be followed as applicable. Maintenance will be properly recorded in the instrument maintenance record.

8.11 Procedures Used to Assess Data, Accuracy, and Completeness:

Method spike recoveries will be used when testing new procedures and training new analysts. The spikes will usually be made at levels appropriate for the analysis (approximately ten (10) times the estimated detection limit).

Matrix spike samples will be analyzed along with sample batches to estimate the accuracy of the analysis. The recovery will be within the 95% confidence interval (i.e., plus or minus two (2) standard deviations) for historical data.

8.11.2 Replicates (Includes Matrix Spike Duplicates):

Replicates will be analyzed along with sample batches to estimate the precision of the analysis. In lieu of historical data, the Relative Percent Difference (RPF) shall be less than or equal to twenty (2) percent (providing the results are at least ten (10) times greater than analytical detection limit) unless the QA/QC is dictated in the method.

8.11.3 Instrument Calibrations:

Instruments will be calibrated with at least three (3) standards (where applicable). Linear regression is the preferred technique to analyze calibration data. In this case the correlation coefficient must meet or exceed the critical value for a 95% confidence interval.

In cases where it might be deemed more suitable to use another method for determining calibration precision (such as computing %RSD of Relative Response Factor values), appropriate confidence limits will be set per method specifications.

8.11.4 General Laboratory Parameters:

Within the laboratory there are numerous other parameters to be evaluated. The objective for any control limits based on historical data will be the 95% confidence interval (mean plus or minus two (2) standard deviations). Other values may have set limits based on method specifications as applicable.

8.12 Corrective Action:

When a control limit is exceeded, the analyst will stop the analysis and investigate the problem. When appropriate, the analyst must demonstrate by analysis that the problem has been corrected. When the cause for the exceedence has been identified and corrected, all data generated by that analysis since the last "in-control" analysis is suspect; all samples analyzed for the failing method should be reanalyzed. If the error can be attributed to a specific event, all data generated since the last "in-control" event must be reevaluated. If the QA failure can be attributed to sample rather than method failure (e.g., matrix effects), the data from that sample, and like samples are suspect and the data from those samples should be flagged or an alternate method used. In this case, other sample data generated concurrently can be reported. All QA failures and the resulting corrective action must be documented in the operating record.

8.12.1 Instrument Calibration Checks:

An instrument calibration check is the repetitive analysis of a given standard to ensure consistent instrument operation form day to day. Some methods utilize specific procedures to evaluate this check. If the value exceeds control limits, the analysis must be stopped and corrective action implemented.

8.12.2 Spike Recoveries:

Percent recoveries for matrix spikes and/or surrogate spikes are monitored by the analysts and must be within the control limits established by multiple analyses under similar conditions.

Outlier values must be documented with an explanation. Some problems may be deemed an unavoidable part of normal operation. Other problems are indicative of the need for re extraction or reanalysis. Corrective actions will be documented. In lieu of historical data, when sufficient data have been collected, CHK may utilize new control limit criteria.

If matrix effects are suspected as the cause of low spike recovery, the same sample is to be re-spiked once. If the recovery is still low, matrix interference can be assumed. Matrix effects can be overcome by changing the point of spike addition in the case of metals (spiking at the instrument rather than at the processing step), by diluting the sample to overcome the interference, or by the use of an alternate analytical method or technique. If the interference cannot be overcome, the data must be flagged and the low recovery must be taken into account in any decision regarding that sample.

8.12.3 Duplicate:

Relative Percent Difference (RPD) criteria are used to evaluate duplicate analyses. The analyst must monitor this value and document the cause of an outlier. The spiking levels for Matrix Spike/Matrix Spike Duplicate should be at least two (2) times the native levels and at least ten (10) times the Method

Detection Limit. Poor precision at low concentrations can contribute significantly to the inaccurate determination of RPD.

8.12.4 Performance Audits:

Performance audits involve the use of blind samples given to an analyst to evaluate the accuracy of an analysis. Major defects which are brought to light by these studies are investigate and appropriate corrective action is taken (e.g., retraining analysts or reanalysis of spike samples). Corrective actions are reported to the Technical Manager.

8.12.6 Method Blanks:

Reagents, process chemicals and laboratory glassware must be monitored for each sample batch to determine their contribution or impact on the analyte concentration. If the Method Blank exceeds the control limit, the analysis must be stopped and the source of the blank contribution identified and corrected. If the blank problem is identified to be universal, once the problem has been rectified, all samples using those chemicals or glassware must be reanalyzed.

8.13 Quality Assurance Reports to Management:

Oral and/or written reports of the results of inspection and other major problems will be provided to the Technical Manager. Other reports will be provided at his/her request.

Figure C-1
Incoming Load Evaluation

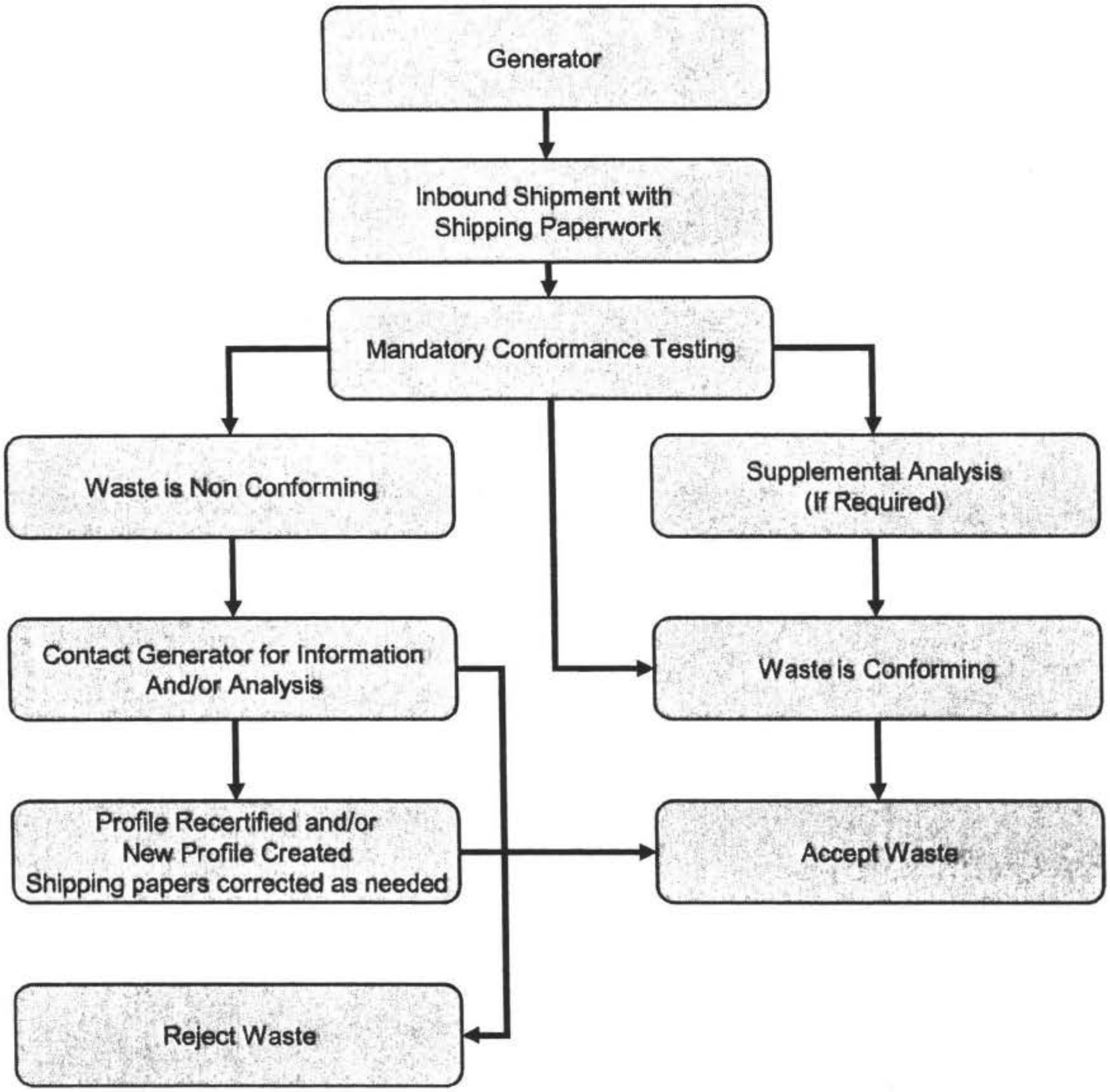
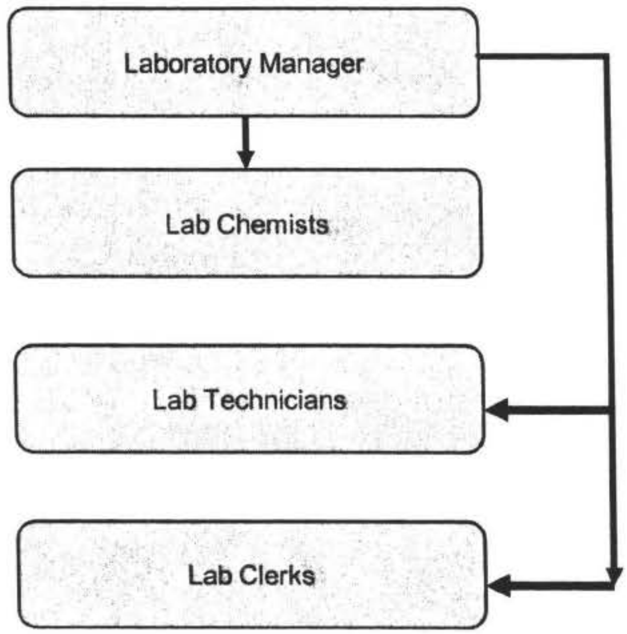


Figure C-2
Laboratory Organization Chart



Attachment C-A

Typical Forms

Attachment C-A

Table of Contents:

CleanHarbors

WASTE MATERIAL PROFILE SHEET

Clean Harbors Profile No. CH480725

A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION #	***MAD999999999***	GENERATOR NAME:	***E Commerce Test Account 1***		
GENERATOR CODE (Assigned by Clean Harbors)	***ECOMT1***	CITY ***Braintree***	STATE/PROVINCE ***MA***	ZIP/POSTAL CODE	***02184***
ADDRESS ***1501 Washington Street***			PHONE: **(803) 691-3525**		
CUSTOMER CODE (Assigned by Clean Harbors)	***ECOMT1***	CUSTOMER NAME:	***E Commerce Test Account 1***		
ADDRESS ***1501 Washington Street***		CITY ***Braintree***	STATE/PROVINCE ***MA***	ZIP/POSTAL CODE	***02184***

B. WASTE DESCRIPTION

WASTE DESCRIPTION:

PROCESS GENERATING WASTE:

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER ?

C. PHYSICAL PROPERTIES (at 25C or 77F)

PHYSICAL STATE	NUMBER OF PHASES/LAYERS	VISCOSITY (If liquid present)	COLOR
SOLID WITHOUT FREE LIQUID POWDER MONOLITHIC SOLID LIQUID WITH NO SOLIDS LIQUID/SOLID MIXTURE % FREE LIQUID % SETTLED SOLID % TOTAL SUSPENDED SOLID SLUDGE GAS/AEROSOL	1 2 3 % BY VOLUME (Approx.) TOP ***0.00*** MIDDLE ***0.00*** BOTTOM ***0.00***	1 - 100 (e.g. Water) 101 - 500 (e.g. Motor Oil) 501 - 10,000 (e.g. Molasses) > 10,000	

ODOR	BOILING POINT ºF (ºC)	MELTING POINT ºF (ºC)	TOTAL ORGANIC CARBON
NONE MILD STRONG Describe:	<= 95 (<=35) 95 - 100 (35-38) 101 - 129 (38-54) >= 130 (>54)	< 140 (<60) 140-200 (60-93) > 200 (>93)	<= 1% 1-9% >= 10%

FLASH POINT ºF (ºC)	pH	SPECIFIC GRAVITY	ASH	BTU/LB (MJ/kg)
< 73 (<23)	<= 2	< 0.8 (e.g. Gasoline)	< 0.1	< 2,000 (<4.6)
73 - 100 (23-38)	2.1 - 6.9	0.8-1.0 (e.g. Ethanol)	0.1 - 1.0	2,000-5,000 (4.6-11.6)
101 -140 (38-60)	7 (Neutral)	1.0 (e.g. Water)	1.1 - 5.0	5,000-10,000 (11.6-23.2)
141 -200 (60-93)	7.1 - 12.4	1.0-1.2 (e.g. Antifreeze)	5.1 - 20.0	> 10,000 (>23.2)
> 200 (>93)	>= 12.5	> 1.2 (e.g. Methylene Chloride)	> 20 Unknown	Actual:

COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL	MIN	–	MAX	UOM

DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")?	YES	NO
If yes, describe, including dimensions:		
DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM?	YES	NO
DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL?	YES	NO
I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:		
The waste was never exposed to potentially infectious material.	YES	NO
Chemical disinfection or some other form of sterilization has been applied to the waste.	YES	NO
I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS.	YES	NO
I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED.	YES	NO

SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE. SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE.

Clean Harbors Profile No. CH480725

E. CONSTITUENTS

Are these values based on testing or knowledge? Knowledge Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

RCRA	REGULATED METALS	REGULATORY LEVEL (mg/l)	TCLP mg/l	TOTAL	UOM	NOT APPLICABLE
D004	ARSENIC	5.0				
D005	BARIUM	100.0				
D006	CADMIUM	1.0				
D007	CHROMIUM	5.0				
D008	LEAD	5.0				
D009	MERCURY	0.2				
D010	SELENIUM	1.0				
D011	SILVER	5.0				
	VOLATILE COMPOUNDS					
D018	BENZENE	0.5				
D019	CARBON TETRACHLORIDE	0.5				
D021	CHLOROBENZENE	100.0				
D022	CHLOROFORM	6.0				
D028	1,2-DICHLOROETHANE	0.5				
D029	1,1-DICHLOROETHYLENE	0.7				
D035	METHYL ETHYL KETONE	200.0				
D039	TETRACHLOROETHYLENE	0.7				
D040	TRICHLOROETHYLENE	0.5				
D043	VINYL CHLORIDE	0.2				
	SEMI-VOLATILE COMPOUNDS					
D023	o-CRESOL	200.0				
D024	m-CRESOL	200.0				
D025	p-CRESOL	200.0				
D026	CRESOL (TOTAL)	200.0				
D027	1,4-DICHLOROBENZENE	7.5				
D030	2,4-DINITROTOLUENE	0.13				
D032	HEXACHLOROBENZENE	0.13				
D033	HEXACHLOROBUTADIENE	0.5				
D034	HEXACHLOROETHANE	3.0				
D036	NITROBENZENE	2.0				
D037	PENTACHLOROPHENOL	100.0				
D038	PYRIDINE	5.0				
D041	2,4,5-TRICHLOROPHENOL	400.0				
D042	2,4,6-TRICHLOROPHENOL	2.0				
	PESTICIDES AND HERBICIDES					
D012	ENDRIN	0.02				
D013	LINDANE	0.4				
D014	METHOXYCHLOR	10.0				
D015	TOXAPHENE	0.5				
D016	2,4-D	10.0				
D017	2,4,5-TP (SILVEX)	1.0				
D020	CHLORDANE	0.03				
D031	HEPTACHLOR (AND ITS EPOXIDE)	0.008				

OTHER CONSTITUENTS	MAX	UOM	NOT APPLICABLE
BROMINE			
CHLORINE			
FLUORINE			
IODINE			
SULFUR			
POTASSIUM			
SODIUM			
AMMONIA			
CYANIDE AMENABLE			
CYANIDE REACTIVE			
CYANIDE TOTAL			
SULFIDE REACTIVE			

HOCs

NONE

< 1000 PPM

>= 1000 PPM

PCBs

NONE

< 50 PPM

>=50 PPM

IF PCBS ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761?

YES NO

ADDITIONAL HAZARDS

DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

YES NO (If yes, explain)

CHOOSE ALL THAT APPLY

DEA REGULATED SUBSTANCE	EXPLOSIVE	FUMING	OSHA REGULATED CARCINOGENS
POLYMERIZABLE	RADIOACTIVE	REACTIVE MATERIAL	NONE OF THE ABOVE

Clean Harbors Profile No. CH480725

F. REGULATORY STATUS

YES NO USEPA HAZARDOUS WASTE?

YES NO DO ANY STATE WASTE CODES APPLY?

Texas Waste Code

YES NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY?

YES NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?

LDR CATEGORY:
VARIANCE INFO:

YES NO IS THIS A UNIVERSAL WASTE?

YES NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG)?

YES NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?

YES NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?

YES NO IS THIS WASTE STREAM SUBJECT TO THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?

YES NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?

YES NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?

YES NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 77 KPA (11.2 PSIA)?

YES NO IS THIS CERCLA REGULATED (SUPERFUND) WASTE ?

YES NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?

Hazardous Organic NESHAP (HON) rule (subpart G) Pharmaceuticals production (subpart GGG)

YES NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?

YES NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?

YES NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?

What is the TAB quantity for your facility? Megagram/year (1 Mg = 2,200 lbs)

The basis for this determination is: Knowledge of the Waste Or Test Data Knowledge Testing

Describe the knowledge :

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME:

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY ONE TIME WEEKLY MONTHLY QUARTERLY YEARLY OTHER

CONTAINERIZED

0-0 CONTAINERS/SHIPMENT

STORAGE CAPACITY:
CONTAINER TYPE:

CUBIC YARD BOX PALLET

TOTE TANK DRUM

OTHER: DRUM SIZE:

BULK LIQUID

GALLONS/SHIPMENT: ***0 Min -0 Max*** GAL.

BULK SOLID

SHIPMENT UOM: TON YARD

TONS/YARDS/SHIPMENT: ***0 Min - 0 Max***

I. SPECIAL REQUEST

COMMENTS OR REQUESTS:

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge. I also certify that any samples submitted are representative of the actual waste. If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to reflect the discrepancy.

AUTHORIZED SIGNATURE NAME (PRINT) TITLE DATE

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

GENERATOR

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.					
	2.					
	3.					
	4.					

VOID

14. Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name — Signature — Month Day Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month Day Year

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month Day Year

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
LAND DISPOSAL RESTRICTION FORM LDR-1

MANIFEST NO________________________

THE HAZARDOUS WASTES IDENTIFIED ON THE HAZARDOUS WASTE MANIFEST IDENTIFIED ABOVE AND BEARING THE EPA HAZARDOUS WASTE CODES LISTED BELOW ARE RESTRICTED WASTES WHICH ARE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT UNDER THE LAND DISPOSAL RESTRICTIONS, 40 CFR PART 268 .7 (a)(2), AND RCRA SECTION 3004(D). IN ACCORDANCE WITH 40 CFR 268.7(a), THE EPA WASTE CODE, WASTE SUBCATEGORY, AND TREATABILITY GROUPS, AS APPLICABLE, ARE INCLUDED BELOW.

INSTRUCTIONS -- COMPLETE ALL SECTIONS. REFER TO PAGE 3 OF THIS FORM FOR KEY TERMS/DEFINITIONS.

Column 1 - Line Item: Enter the manifest line item number (e.g., 11a) that corresponds to the waste code(s).

Column 2 - Waste Codes/Subcategory: Check off all applicable waste codes. For D001 through D043, also check applicable subcategory; for F001 through F005, check applicable constituents.

Column 3 - Wastewater/Non-wastewater: Check off "WW" for wastewater and "Non-WW" for non-wastewaters.

Column 4 - LDR Handling Code: Circle the appropriate handling code, as follows:

1 = The waste is a characteristic hazardous waste D001, D002, D003, D004-D011, or D018-43 which is intended for treatment/disposal in a CWA system, CWA-equivalent system, or Class I SDWA system. Underlying Hazardous Constituents (UHC's) are NOT required to be identified.

1A = The waste is a characteristic hazardous waste D001 High TOC Ignitable Liquids Subcategory (i.e., greater than or equal to 10% TOC). Pursuant to 40 CFR 268.40, the waste must be treated using organic recovery (RORGS) or combustion (CMBST) technology. UHC's are NOT required to be identified.

2 = The waste is a characteristic hazardous waste D001 (other than High TOC Ignitable Liquids), D002, D003 Explosive, Water Reactive or Other Reactive subcategory, D004-D011, D012-17 non-wastewater, or D018-43 which is intended for treatment/disposal in a non-CWA system, non-CWA-equivalent system, or non-Class I SDWA system located in the United States. All UHC's which are reasonably expected to be present must be identified, except for D001 waste that is intended to be treated using organic recovery (RORGS) or combustion (CMBST) technologies. Identify UHC's by completing Sections I and IV of CHI Form LDR-1 Addendum and attach completed Addendum to this form.

3 = The waste is a characteristic (i.e., D-code) or listed (i.e., F-, K-, U-, or P-code) hazardous waste which is intended for export and treatment/disposal at a facility located outside the United States. LDR treatment standards do not apply to hazardous waste treated/disposed in a foreign country, and per USEPA guidance, the identification of UHC's (if applicable) is not required for hazardous waste that is intended to be exported. Note however that if the exported waste is subsequently returned for treatment/disposal in the United States, all applicable LDR regulations would apply and a revised LDR notification would be required.

4 = The waste meets the definition of hazardous debris pursuant to 40 CFR 268.2(h) and is intended for treatment/ disposal in compliance with the alternate debris treatment technologies of 40 CFR 268.45. In accordance with the requirements of 40 CFR 268.7(a)(2) : the contaminants subject to treatment (CSTT's) must be identified as part of this notification. Identify CSTT's by completing Section III and IV of the CHI Form LDR-1 Addendum and attach completed Addendum to this form. These constituents are being treated to comply with 40 CFR 268.45.

5 = The waste is a characteristic waste D003 Reactive Sulfide, Reactive Cyanide, or Unexploded Ordnance subcategory, a characteristic waste D012- 17 wastewater, or a listed (i.e., F-, K-, U-, or P-code) hazardous waste. UHC's are NOT required to be identified.

6 = The waste is a lab pack that is intended for incineration using the alternative lab pack treatment standard under 40 CFR 268.42(c). UHC's are NOT required to be identified; however, the generator must complete and attach the lab pack certification statement on CHI Form LDR-LP. Note that in accordance with 40 CFR Part 268 Appendix IV, lab packs which contain waste codes D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, and U151 are not eligible for alternative lab pack treatment standard.

*** **NOTE: IF THE WASTE IS A SOIL CONTAMINATED WITH A LISTED OR CHARACTERISTIC WASTE AND THE GENERATOR WANTS TO USE THE ALTERNATE TREATMENT STANDARD FOR SOILS, CONTACT CORPORATE COMPLIANCE FOR THE APPROPRIATE LDR NOTIFICATION FORM.**

SECTION I. CHARACTERISTIC WASTES D001 THROUGH D043

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
________	[ ] D001 Ignitables, except High TOC subcategory	[ ] WW [ ] Non-WW	1 2 3 4 6
________	[ ] D001 High TOC Ignitable Liquids Subcategory (Greater than or equal to 10% TOC)	[ ] Non-WW only	1A 3 6
________	[ ] D002 Corrosives	[ ] WW [ ] Non-WW	1 2 3 4 6
________	[ ] D003		
	[ ] Reactive Sulfide, per 261.23 (a)(5)	[ ] WW [ ] Non-WW	1 3 4 5 6
	[ ] Reactive Cyanide, per 261.23(a)(5)	[ ] WW [ ] Non-WW	1 3 4 5 6
	[ ] Explosive, per 261.23(a)(6), (7) & (8)	[ ] WW [ ] Non-WW	1 2 3 4 6
	[ ] Water Reactive, per 261.23(a)(2), (3) & (4)	[ ] Non-WW only	1 2 3 4 6
	[ ] Other Reactive, per 261.23(a)(1)	[ ] WW [ ] Non-WW	1 2 3 4 6
	[ ] Unexploded Ordnance, Emergency Response	[ ] WW [ ] Non-WW	1 3 4 5 6
________	[ ] D004 Arsenic	[ ] WW [ ] Non-WW	1 2 3 4 6
________	[ ] D005 Barium	[ ] WW [ ] Non-WW	1 2 3 4 6
________	[ ] D006		
	[ ] Cadmium	[ ] WW [ ] Non-WW	1 2 3 4 6
	[ ] Cadmium Containing Batteries	[ ] Non-WW only	2 3 6
________	[ ] D007 Chromium	[ ] WW [ ] Non-WW	1 2 3 4 6
________	[ ] D008		
	[ ] Lead	[ ] WW [ ] Non-WW	1 2 3 4 6
	[ ] Lead Acid Batteries	[ ] Non-WW only	2 3 6

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
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SECTION I. CHARACTERISTIC WASTES D001-43 (CONTINUED)

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
______	[ ] D009		
	[ ] Low Mercury, less than 260 mg/kg Mercury	[ ] WW [ ] Non-WW	1 2 3 4
	[ ] High Mercury Organic Subcategory	[ ] Non-WW only	2 3 4
	[ ] High Mercury Inorganic Subcategory	[ ] Non-WW only	2 3 4
______	[ ] D010 Selenium	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D011 Silver	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D012 Endrin	[ ] WW [ ] Non-WW	2 3 4 5 6
______	[ ] D013 Lindane	[ ] WW [ ] Non-WW	2 3 4 5 6
______	[ ] D014 Methoxychlor	[ ] WW [ ] Non-WW	2 3 4 5 6
______	[ ] D015 Toxaphene	[ ] WW [ ] Non-WW	2 3 4 5 6
______	[ ] D016 2,4-D	[ ] WW [ ] Non-WW	2 3 4 5 6
______	[ ] D017 2,4,5-TP (Silvex)	[ ] WW [ ] Non-WW	2 3 4 5 6
______	[ ] D018 Benzene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D019 Carbon tetrachloride	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D020 Chlordane	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D021 Chlorobenzene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D022 Chloroform	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D023 o-Cresol	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D024 m-Cresol	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D025 p-Cresol	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D026 Cresol	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D027 1,4-Dichlorobenzene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D028 1,2-Dichloroethane	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D029 1,1-Dichloroethylene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D030 2,4-Dinitrotoluene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D031 Heptachlor (and its epoxide)	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D032 Hexachlorobenzene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D033 Hexachlorobutadiene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D034 Hexachloroethane	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D035 Methyl ethyl ketone	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D036 Nitrobenzene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D037 Pentachlorophenol	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D038 Pyridine	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D039 Tetrachloroethylene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D040 Trichloroethylene	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D041 2,4,5-Trichlorophenol	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D042 2,4,6-Trichlorophenol	[ ] WW [ ] Non-WW	1 2 3 4 6
______	[ ] D043 Vinyl Chloride	[ ] WW [ ] Non-WW	1 2 3 4 6

SECTION II. <u>SPENT SOLVENT WASTES F001 THROUGH F005</u>

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
______	[ ] F001 [ ] F002 [ ] F003 [ ] F004 [ ] F005	[ ] WW [ ] Non-WW	3 4 5 6

______ [ ] 1. ALL F001-F005
______ [ ] 2. Acetone
______ [ ] 3. Benzene
______ [ ] 4. n-Butyl alcohol
______ [ ] 5. Carbon disulfide
______ [ ] 6. Carbon tetrachloride
______ [ ] 7. Chlorobenzene
______ [ ] 8. o-Cresol
______ [ ] 9. m-Cresol (difficult to distinguish from p-cresol)
______ [ ] 10. p-Cresol (difficult to distinguish from m-cresol)
______ [ ] 11. Cresol - mixed isomers (sum of o-, m- and p-cresol)

______ [ ] 12. Cyclohexanone
______ [ ] 13. o-Dichlorobenzene
______ [ ] 14. 2-Ethoxyethanol (F005) only)
______ [ ] 15. Ethyl acetate
______ [ ] 16. Ethyl benzene
______ [ ] 17. Ethyl ether
______ [ ] 18. Isobutyl alcohol
______ [ ] 19. Methanol
______ [ ] 20. Methylene chloride
______ [ ] 21. Methyl ethyl ketone
______ [ ] 22. Methyl isobutyl ketone
______ [ ] 23. Nitrobenzene
______ [ ] 24. 2-Nitropropane (F005 only)

______ [ ] 25. Pyridine
______ [ ] 26. Tetrachloroethylene
______ [ ] 27. Toluene
______ [ ] 28. 1,1,1-Trichloro-ethane
______ [ ] 29. 1,1,2-Trichloro-ethane
______ [ ] 30. Trichloroethylene
______ [ ] 31. 1,1,2-Trichloro-1,2,2-trifluoroethane
______ [ ] 32. Trichloromonofluoro-methane
______ [ ] 33. Xylene - mixed isomers (sum of o-, m-, and p-xylene)

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SECTION III. CALIFORNIA LIST WASTES

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
________	Hazardous waste containing one or more of the following California List constituents:	[ ] WW [ ] Non-WW	1 2 3 4 6

[ ] ALL CALIFORNIA LIST CONSTITUENTS
[ ] Liquids with nickel greater than or equal to 134 mg/l
[ ] Liquids with thallium greater than or equal to 130 mg/l
[ ] Liquids with PCB's > or = 50 ppm
[ ] Waste containing HOC's > or = 1,000 mg/kg

SECTION IV. OTHER LISTED WASTES (F006-12, F019-F028, F037-38, F039, K-, U-, AND P-CODES)

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
_____	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
_____	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
_____	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
_____	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
_____	______________________________	[ ] WW [ ] Non-WW	3 4 5 6

[ ] CHECK HERE IF ADDITIONAL LISTED WASTE CODES ARE PRESENT. COMPLETE AND ATTACH LDR-1 CONTINUATION SHEET.
[ ] CHECK HERE IF WASTE CODE F039 (MULTISOURCE LEACHATE) IS PRESENT. IDENTIFY F039 CONSTITUENTS BY COMPLETING SECTIONS II AND IV OF CHI FORM LDR-1 ADDENDUM AND ATTACH COMPLETED ADDENDUM TO THIS FORM.

SECTION V. CONTACT NAME AND DATE

Print Name: ______________________________ Date:______________________________

KEY TERMS/DEFINITIONS

CLASS I SDWA SYSTEM means a Class I deep well facility regulated under the Safe Drinking Water Act (SDWA).

CWA SYSTEM means a centralized wastewater treatment facility discharging under a Clean Water Act (CWA) permit. For example, a CWA facility would treat organic or inorganic aqueous wastes and discharge the treated effluent to the local sewer system. Examples of CWA treatment systems owned and operated by Clean Harbors include the wastewater treatment operations at Baltimore (including the CES system), Bristol, Chicago, Cincinnati and Cleveland.

CWA-EQUIVALENT SYSTEM means a "zero discharge system" that engages in "CWA-equivalent" treatment before land disposal. Zero-discharge facilities treat hazardous wastes using "CWA-equivalent" treatment methods, but do not discharge the treatment effluent to a sewer or water body (e.g., spray irrigation land farm). "CWA-equivalent" treatment methods means biological treatment for organics, alkaline chlorination, or ferrous sulfate precipitation for cyanide, precipitation/ sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.

HIGH TOC IGNITABLE LIQUIDS SUBCATEGORY means an ignitable liquid hazardous waste (waste code D001) which contains greater than or equal to 10% total organic carbon (TOC). Pursuant to 40 CFR 268.40, such wastes must be treated using organic recovery (RORGS) or combustion (CMBST) technology. Examples of RORGS technologies include the CES unit at Clean Harbors of Baltimore. Examples of CMBST technologies include hazardous waste fuel blending and subsequent reuse at a cement kiln, or destruction at a RCRA incinerator.

WASTEWATERS are wastes that contain less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS). [See 40 CFR 268.2(f)]

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CONTINUATION SHEET FOR USE WITH
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SECTION IV. OTHER LISTED WASTES (F006-12, F019-F028, F037-38, F039, K-, U-, AND P-CODES)
CONTINUED FROM PAGE 3 OF FORM LDR-1

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6
________	______________________________	[ ] WW [ ] Non-WW	3 4 5 6

SECTION I. WASTE CODES ELIGIBLE FOR ALTERNATIVE TREATMENT STANDARD

[ ] Check here if the lab pack contains only those hazardous wastes codes which are NOT listed in 40 CFR Appendix IV (see Key Terms below), and which is intended for incineration in accordance with the alternative treatment standard in 40 CFR 268.42(c). If checked, complete the lab pack certification statement in Section II.

[ ] Check here if the lab pack contains one or more hazardous waste codes identified in 40 CFR Part 268 Appendix IV (see Key Terms below). If checked, the lab pack IS NOT eligible for the alternative lab pack treatment standard.

SECTION II. GENERATOR CERTIFICATION AND SIGNATURE (REQUIRED)

I CERTIFY UNDER PENALTY OF LAW THAT I PERSONALLY HAVE EXAMINED AND AM FAMILIAR WITH THE WASTE AND THAT THE LAB PACK CONTAINS ONLY WASTES THAT HAVE NOT BEEN EXCLUDED UNDER APPENDIX IV TO 40 CFR PART 268 AND THAT THIS LABPACK WILL BE SENT TO A COMBUSTION FACILITY IN COMPLIANCE WITH THE ALTERNATIVE TREATMENT STANDARDS FOR LABPACKS AT 40 CFR 268.42(c). I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING A FALSE CERTIFICATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

Authorized Signature: ______________________________

Date: ____________________

KEY TERMS/DEFINITIONS

LAB PACK means waste materials classed as US DOT Class or Division 3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, or 9. Outer packaging must be either open head steel, aluminum, fiber, plastic or plywood drum, meeting at least packing group III performance levels. Each outer packaging must contain only one class of hazardous material. Inner containers may be glass not exceeding 1 gallon capacity, or metal or plastic not exceeding 5.3 gallons capacity. Gross weight of the container may not exceed 452 pounds. Inner packagings containing liquids must have sufficient absorbent material to absorb all liquid contents. [See 49 CFR 172.13]

PART 268 APPENDIX IV means the following waste codes identified in 40 CFR 268 Appendix IV which are not eligible for treatment using the alternative lab pack treatment standard in 40 CFR 268.42(c): D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, and U151.

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LAND DISPOSAL RESTRICTION NOTIFICATION FORM LDR-1 ADDENDUM   Manifest No.____________________

SECTION I. UNDERLYING HAZARDOUS CONSTITUENTS (UHC'S)

[ ] Check here if one or more of the constituents listed in Section IV below are reasonably expected to be present as an "Underlying Hazardous Constituent" in the waste. Then in Section IV, check off each constituent. Note that per the definition of UHC in 40 CFR 268.2, fluoride, selenium, sulfides, vanadium and zinc are NOT regulated as UHC's.

[ ] Check here if NONE of the UHC constituents listed in Section IV are expected to be present in the waste.

SECTION II. MULTI-SOURCE LEACHATE (WASTE CODE F039)

[ ] Check here if one or more of the constituents listed in Section IV are present as a constituent in the multi-source leachate (F039) waste. Then in Section IV below, check off each constituent. Note that constituents which are identified by an asterisk (*) are NOT regulated as F039 constituents.

[ ] Check here if NONE of the F039 constituents listed in Section IV are present in the waste.

SECTION III. HAZARDOUS DEBRIS CONTAMINANTS SUBJECT TO TREATMENT (CSTT)

[ ] Check here if one or more of the constituents listed in Section IV is a CSTT for hazardous debris that is intended for treatment using the alternate treatment technologies in 40 CFR 268.45. To identify CSTT's, refer to the "Regulated Hazardous Constituent" column in the Treatment Standard Table in 40 CFR 268.40. Then, in Section IV below, check off the constituents that appear for each waste code used to identify the debris.

[ ] Check here if the entry in the "Regulated Hazardous Constituent" column in the Treatment Standard Table in 40 CFR 268.40 is "Not Applicable" , i.e. D001, D002, and D003 (non-cyanides subcategories only).

SECTION IV. LIST OF CONSTITUENTS - INCLUDE MANIFEST LINE ITEM

34._____ [ ] Acenaphthylene
35._____ [ ] Acenaphthene
36._____ [ ] Acetone
37._____ [ ] Acetonitrile
38._____ [ ] Acetophenone
39._____ [ ] 2-Acetylaminofluorene
40._____ [ ] Acrolein
41._____ [ ] Acrylamide (*)
42._____ [ ] Acrylonitrile
251._____ [ ] Aldicarb sulfone (*)
43._____ [ ] Aldrin
44._____ [ ] 4-Aminobiphenyl
45._____ [ ] Aniline
46._____ [ ] Anthracene
47._____ [ ] Antimony
48._____ [ ] Aramite
49._____ [ ] Arsenic
50._____ [ ] alpha-BHC
51._____ [ ] beta-BHC
52._____ [ ] delta-BHC
53._____ [ ] gamma-BHC
252._____ [ ] Barban (*)
54._____ [ ] Barium
253._____ [ ] Bendiocarb (*)
255._____ [ ] Benomyl (*)
55._____ [ ] Benzene
56._____ [ ] Benz(a)anthracene
57._____ [ ] Benzal chloride (*)
58._____ [ ] Benzo(b)fluoranthene (difficult to distinguish from Benzo(k)fluoranthene)
59._____ [ ] Benzo(k)fluoranthene (difficult to distinguish from Benzo(b)fluoranthene)
60._____ [ ] Benzo(g,h,i)perylene
61._____ [ ] Benzo(a)pyrene
62._____ [ ] Berylium
63._____ [ ] Bromodichloromethane
64._____ [ ] Bromomethane (Methyl bromide)
65._____ [ ] 4-Bromophenyl phenyl ether
66._____ [ ] n-Butyl alcohol
256._____ [ ] Butylate (*)
67._____ [ ] Butyl benzyl phthalate
68._____ [ ] 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)
69._____ [ ] Cadmium
257._____ [ ] Carbaryl (*)
258._____ [ ] Carbendazim (*)
259._____ [ ] Carbofuran (*)
260._____ [ ] Carbofuran phenol (*)
70. _____ [ ] Carbon disulfide
71. _____ [ ] Carbon tetrachloride
261. _____ [ ] Carbosulfan (*)
72. _____ [ ] Chlordane (alpha and gamma isomers)
73. _____ [ ] p-Chloroaniline
74. _____ [ ] Chlorobenzene
75. _____ [ ] Chlorobenzilate
76. _____ [ ] 2-Chloro-1,3-butadiene
77. _____ [ ] Chlorodibromomethane
78. _____ [ ] Chloroethane
79. _____ [ ] bis(2-Chloroethoxy)methane
80. _____ [ ] bis(2-Chloroethyl)ether
81. _____ [ ] Chloroform
82. _____ [ ] bis(2-Chloroisopropyl)ether
83. _____ [ ] p-Chloro-m-cresol
84. _____ [ ] 2-Chloroethyl vinyl ether (*)
85. _____ [ ] Chloromethane (Methyl Chloride)
86. _____ [ ] 2-Chloronaphthalene
87. _____ [ ] 2-Chlorophenol
88. _____ [ ] 3-Chloropropylene
89. _____ [ ] Chromium (Total)
90. _____ [ ] Chrysene
91. _____ [ ] o-Cresol
92. _____ [ ] m-Cresol (difficult to distinguish from p-Cresol)
93. _____ [ ] p-Cresol (difficult to distinguish from o-Cresol)
262. _____ [ ] m-Cumenyl methylcarbamate (*)
94. _____ [ ] Cyanides (Total)
95. _____ [ ] Cyanides (Amenable)
263. _____ [ ] Cycloate (*)
96. _____ [ ] Cyclohexanone
97. _____ [ ] 1,2-Dibromo-3-chloropropane
98. _____ [ ] 1,2-Dibromoethane (Ethylene dibromide)
99. _____ [ ] Dibromomethane
100. _____ [ ] 2,4-Dichlorophenoxyacetic acid (2,4-D)
101. _____ [ ] o,p'-DDD
102. _____ [ ] p,p'-DDD
103. _____ [ ] o,p'-DDE
104. _____ [ ] p,p'-DDE
105. _____ [ ] o,p'-DDT
106. _____ [ ] p,p'-DDT
107. _____ [ ] Dibenz(a,h)anthracene
108. _____ [ ] Dibenzo(a,e)pyrene
109. _____ [ ] m-Dichlorobenzene
110. _____ [ ] o-Dichlorobenzene
111. _____ [ ] p-Dichlorobenzene

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112. _____ [ ] Dichlorodifluoromethane
113. _____ [ ] 1,1-Dichloroethane
114. _____ [ ] 1,2-Dichloroethane
115. _____ [ ] 1,1-Dichloroethylene
116. _____ [ ] trans-1,2-Dichloroethylene
117. _____ [ ] 2,4-Dichlorophenol
118. _____ [ ] 2,6-Dichlorophenol
119. _____ [ ] 1,2-Dichloropropane
120. _____ [ ] cis-1,3-Dichloropropylene
121. _____ [ ] trans-1,3-Dichloropropylene
122. _____ [ ] Dieldrin
123. _____ [ ] Diethyl phthalate
124. _____ [ ] 2,4-Dimethyl phenol
125. _____ [ ] Dimethyl phthalate
126. _____ [ ] Di-n-butyl phthalate
127. _____ [ ] 1,4-Dinitrobenzene
128. _____ [ ] 4,6-Dinitro-o-cresol
129. _____ [ ] 2,4-Dinitrophenol
130. _____ [ ] 2,4-Dinitrotoluene
131. _____ [ ] 2,6-Dinitrotoluene
132. _____ [ ] Di-n-octyl phthalate
133. _____ [ ] p-Dimethylaminoazobenzene (*)
134. _____ [ ] Di-n-propylnitrosoamine
135. _____ [ ] 1,4-Dioxane (*)
136. _____ [ ] Diphenylamine (difficult to distinguish from
137. _____ [ ] Diphenylnitrosamine (difficult to distinguish
from
diphenylamine)
138. _____ [ ] 1,2-Diphenylhydrazine
139. _____ [ ] Disulfoton
266. _____ [ ] Dithiocarbamates (Total) (*)
140. _____ [ ] Endosulfan I
141. _____ [ ] Endosulfan II
142. _____ [ ] Endosulfan sulfate
143. _____ [ ] Endrin
144. _____ [ ] Endrin aldehyde
267. _____ [ ] EPTC (*)
145. _____ [ ] Ethyl acetate
146. _____ [ ] Ethyl cyanide (propanenitrile)
147. _____ [ ] Ethyl benzene
148. _____ [ ] Ethyl ether
149. _____ [ ] bis(2-Ethylhexyl)phthalate
150. _____ [ ] Ethyl methacrylate
151. _____ [ ] Ethylene oxide
152. _____ [ ] Famphur
153. _____ [ ] Fluoranthene
154. _____ [ ] Fluorene
155. _____ [ ] Fluoride
268. _____ [ ] Formetanate hydrochloride (*)
156. _____ [ ] Heptachlor
157. _____ [ ] Heptachlor epoxide
158. _____ [ ] Hexachlorobenzene
159. _____ [ ] Hexachlorobutadiene
160. _____ [ ] Hexachlorocylopentadiene
161. _____ [ ] HxCDDs (All hexachlorodibenzo-p-dioxins)
162. _____ [ ] HxCDFs (All hexachlorodibenzo-furans)
163. _____ [ ] Hexachloroethane
164. _____ [ ] Hexachloropropylene
165. _____ [ ] Indeno (1,2,3-c,d)pyrene
270. _____ [ ] 3-Iodo-2-propynyl n-butylcarbamate (*)
166. _____ [ ] Iodomethane
167. _____ [ ] Isobutyl alcohol
168. _____ [ ] Isodrin
169. _____ [ ] Isosafrole
170. _____ [ ] Kepone
171. _____ [ ] Lead
172. _____ [ ] Mercury--Nonwastewater from Retort
173. _____ [ ] Mercury--All others
174. _____ [ ] Methacrylonitrile
175. _____ [ ] Methanol

176. _____ [ ] Methapyrilene
272. _____ [ ] Methiocarb (*)
273. _____ [ ] Methomyl (*)
177. _____ [ ] Methoxychlor
178. _____ [ ] 3-Methylcholanthrene
179. _____ [ ] 4,4-Methylene-bis(2-chloroaniline)
180. _____ [ ] Methylene chloride
181. _____ [ ] Methyl ethyl ketone
182. _____ [ ] Methyl isobutyl ketone
183. _____ [ ] Methyl methacrylate
184. _____ [ ] Methyl methansulfonate
185. _____ [ ] Methyl parathion
274. _____ [ ] Metolcarb (*)
275. _____ [ ] Mexacarbate (*)
276. _____ [ ] Molinate (*)
186. _____ [ ] Naphthalene
187. _____ [ ] 2-Naphthylamine
188. _____ [ ] Nickel
189. _____ [ ] o-Nitroaniline (*)
190. _____ [ ] p-Nitroaniline
191. _____ [ ] Nitrobenzene
192. _____ [ ] 5-Nitro-o-toluidine
193. _____ [ ] o-Nitrophenol (*)
diphenylnitrosamine)
194. _____ [ ] p-Nitrophenol
195. _____ [ ] N-Nitrosodiethylamine
196. _____ [ ] N-Nitrosodimethylamine
197. _____ [ ] N-Nitroso-di-n-butylamine
198. _____ [ ] N-Nitrosomethylethylamine
199. _____ [ ] N-Nitrosomorpholine
200. _____ [ ] N-Nitrosopiperidine
201. _____ [ ] N-Nitrosopyrrolidine
277. _____ [ ] Oxamyl (*)
202. _____ [ ] Parathion
203. _____ [ ] Total PCBs (sum of all PCB isomers, or all Arochlors)
278. _____ [ ] Pebulate (*)
204. _____ [ ] Pentachlorobenzene
205. _____ [ ] PeCDDs (All pentachlorodibenzo- p-dioxins)
206. _____ [ ] PeCDFs (All pentachlorodibenzofurans).
207. _____ [ ] Pentachloroethane (*)
208. _____ [ ] Pentachloronitrobenzene
209. _____ [ ] Pentachlorophenol
210. _____ [ ] Phenacetin
211. _____ [ ] Phenanthrene
212. _____ [ ] Phenol
213. _____ [ ] Phorate
214. _____ [ ] Phthalic acid (*)
215. _____ [ ] Phthalic anhydride
280. _____ [ ] Physostigmine (*)
281. _____ [ ] Physostigmine salicylate (*)
282. _____ [ ] Promecarb (*)
216. _____ [ ] Pronamide
283. _____ [ ] Propham (*)
284. _____ [ ] Propoxur (*)
285. _____ [ ] Prosulfocarb (*)
217. _____ [ ] Pyrene
218. _____ [ ] Pyridine
219. _____ [ ] Safrole
220. _____ [ ] Selenium
221. _____ [ ] Silver
222. _____ [ ] Silvex (2,4,5-TP)
223. _____ [ ] Sulfide
224. _____ [ ] 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
225. _____ [ ] 1,2,4,5-Tetrachlorobenzene
226. _____ [ ] TCDDs (All tetrachlorodibenzo- p-dioxins)
227. _____ [ ] TCDFs (All tetrachlorodibenzofurans)
228. _____ [ ] 1,1,1,2-Tetrachloroethane
229. _____ [ ] 1,1,2,2-Tetrachloroethane
230. _____ [ ] Tetrachloroethylene

231. _____ [ ] 2,3,4,6-Tetrachlorophenol
232. _____ [ ] Thallium
286. _____ [ ] Thiodicarb (*)
287. _____ [ ] Thiophanate-methyl (*)
233. _____ [ ] Toluene
234. _____ [ ] Toxaphene
289. _____ [ ] Triallate (*)
235. _____ [ ] Tribromomethane (Bromoform)
236. _____ [ ] 1,2,4-Trichlorobenzene
237. _____ [ ] 1,1,1-Trichloroethane
238. _____ [ ] 1,1,2-Trichloroethane
239. _____ [ ] Trichloroethylene
240. _____ [ ] Trichloromonofluoromethane
241. _____ [ ] 2,4,5-Trichlorophenol
242. _____ [ ] 2,4,6-Trichlorophenol
243. _____ [ ] 1,2,3-Trichloropropane
244. _____ [ ] 1,1,2-Trichloro-1,2,2-trifluoroethane
290. _____ [ ] Triethylamine (*)
245. _____ [ ] tris-(2,3-Dibromopropyl)phosphate
246. _____ [ ] Vanadium (*)
291. _____ [ ] Vernolate (*)
247. _____ [ ] Vinyl chloride
248. _____ [ ] Xylenes--mixed isomers (sum of o-, m-, and p-xylene concentrations)
249. _____ [ ] Zinc (*)

KEY TERMS/DEFINITIONS

CONTAMINANTS SUBJECT TO TREATMENT (CSTT) are the specific constituents listed by waste code number in the Treatment Standard Table in §268.40. CSTT's must be identified for all hazardous debris wastes that are intended for treatment using one of the hazardous debris alternate treatment technologies described in §268.45.

REASONABLY EXPECTED TO BE PRESENT means that the generator is relying on knowledge of the raw materials used, the process, and potential reaction products, or on the results of a one-time analysis for the entire list of UHC's that may be present in the untreated hazardous waste. If a one-time analysis of the entire list of UHC's is conducted, subsequent analyses are required for only those pollutants which would reasonably be expected to be present in the waste as generated, based on the previous sampling and analysis results.

UNDERLYING HAZARDOUS CONSTITUENT (UHC) means any constituent listed in §268.48 Table UTS - Universal Treatment Standards (except fluoride, selenium, sulfides, vanadium and zinc) which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. [See 40 CFR 268.2]

CleanHarbors Waste Receiving Report

Plant Received Date:	6/10/2011 12:00 AM	Generator:	
Work Order #:		Customer:	
Receiving Facility:		Manifest:	Cnt: 1
Equipment:		Genrtr EPA ID:	State EPA ID:

Line Item	DOT Name / TDG	Cont. No Type	Total Quantity	Unit Wgt/vol	Pre Code	Scnd Wst	Profile Number	Pre-Note	Expected H Code
1	UN1263, WASTE Paint, 3, PG II	2 DM	110	G	FB3		GBVIL-001		H141

Profile Consituents (Ordered by Max %) Uom Min Max

OIL BASED PAINT	P	70.0	80.0	XYLENES-MIXED ISOMERS	P	10.0	12.0	Cyclohexane	P	2.0	4.0
ETHYL BENZENE	P	2.0	4.0	BUTYL ACETATE	P	2.0	4.0	TOLUENE	P	2.0	3.0

Safety, Handling, or Special Instructions: PPE Waste Safety Data Sheet: T-1 Level C

* Subject to RCRA AIR Regs. Use DOT Container or contact CPG.*

This waste is regulated under RCRA subpart CC, and is considered 'in light material service'. If shipped in an intermediate bulk or bulk container, notify compliance department immediately. * Air Monitoring may be required. Do NOT Consolidate *

Waste Codes: D001 F003 F005

Billing Requirements:

Special Instructions:

Container Y/N	Weight Y/N
	N

Drum No.	Final Code	Cont. Size	Cont. Type	H20 Mix (+/-)	PH (Value)	Ign (+/-)	CN (+/-)	Sulfide (+/-)	PCB Value	Rad (+/-)	Oxid (+/-)	CC Insp	Chl (+/-)	Voc	Weight	Weight UOM	Comments
24320636		55DM	DM														
24320637		55DM	DM														

Attachment C-B

Waste List for Clean Harbors Kansas

Clean Harbors Kansas, LLC
Waste List

EPA Hazardous Waste Number:	Hazardous Waste/Constituent:

Hazardous Waste by Characteristic:

D001 (I)	Ignitability
D002 (C)	Corrosivity
D003 (R)	Reactivity
D004 (E)	Arsenic
D005 (E)	Barium
D006 (E)	Cadmium
D007 (E)	Chromium
D008 (E)	Lead
D009 (E)	Mercury
D010 (E)	Selenium
D011 (E)	Silver
D012 (E)	Endrin (1,2,3,4,10,10-hexachloro-1,7 epoxy-1,4,4a,5,6,;7,8,8a-octahydro-1,4 endo,endo-5,8-dimeth-ano-naphthalene)
DO13 (E)	Lindane (1,2,3,4,5,6, hexa-chloro-cyclohexane, gamma isomer
D014 (E)	Methoxychlor (1,1,1-Trichloro- 2,2-bis [p-methoxyphenyl]ethane
D015 (E)	Toxaphene ($C_{10}H_{10}Cl_8$, technical chlorinated camphene, 67-69 percent chlorine)
D016 (E)	2,4-D (2,4 dichlorophenoxyacetic acid)
D017 (E)	2,4,5-TP Silvex (2,4,5-trichloro-phenoxypropionic acid)
D018 (E)	Benzene
D019 (E)	Carbon tetrachloride
D020 (E)	Chlordane
D021 (E)	Chlorobenzene
D022 (E)	Choroform
D023 (E)	o-Cresol
D024 (E)	m-Cresol
D025 (E)	p-Cresol
D026 (E)	Cresol
D027 (E)	1,4-Dichlorobenzene
D028 (E)	1,2-Dichloroethane
D029 (E)	1,1-Dichloroethylene

Basis for listing or class of hazardous waste:

(I) Ignitable	Toxicity Characteristic Waste (E)
(C) Corrosive	Acute Hazardous Waste (H)
(R) Reactive	Toxic Waste (T)

EPA Hazardous Waste Number:	Hazardous Waste/Constituent:
D030 (E)	2,4-Dinitrotoluene
D031 (E)	Heptachlor (and its hydroxide)
D032 (E)	Hexachlorobenzene
D033 (E)	Hexachloro-1,3-butadiene
D034 (E)	Hexachloroethane
D035 (E)	Methyl ethyl ketone
D036 (E)	Nitrobenzene
D037 (E)	Pentachlorophenol
D038 (E)	Pyridine
D039 (E)	Tetrachloroethylene
D040 (E)	Trichloroethylene
D041 (E)	2,4,5-Trichlorophenol
D042 (E)	2,4,6-Trichlorophenol
D043 (E)	Vinyl Chloride

Basis for listing or class of hazardous waste:

(I) Ignitable	Toxicity Characteristic Waste (E)
(C) Corrosive	Acute Hazardous Waste (H)
(R) Reactive	Toxic Waste (T)